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ABSTRACT

The Compensatory Education Demonstration Projects are a three-year study of the effects of changes in ESEA Title I fund allocation at the intra-district level. Thirteen Local Education Agencies (LEAs) are cooperating in this research. During 1975-76 these school districts conducted their Title I programs under current federal Title I guidelines. This report describes findings derived from data obtained during 1975-76. It provides information about Title I allocation within the 13 LEAs prior to the receipt of waivers, and as such, describes the various baselines from which allocation changes were made. Among the baseline measures described are the following: (1) characteristics of students serviced by Title I and other compensatory programs within the demonstration districts, (2) instruction and support services experienced by Title I and non Title I students within the demonstration districts, (3) organization and administration of compensatory programs and instructional services delivered within the demonstration districts, (4) reaction of parents to proposed changes in Title I allocation policy and parent involvement in policy making within the demonstration districts, and (5) aspects of the State Education Agencies (SEAs) and LEAs that may have influenced the selection of alternative allocation options by the demonstration districts. A conclusion which may be drawn from the baseline information presented in this report is that current Title I allocation policy at the Federal and State level permits substantial variation in the allocation of resources at the district level. (Author/AM)

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Analysis of Baseline Data

VOLUME I

October 31, 1977

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FOREWORD

The Compensatory Education Demonstration Projects are a three-year study of the effects of changes in ESEA Title I funds allocation at the intra-district level. Thirteen Local Education Agencies (LEAs) are cooperating with the National Institute of Education, the sponsoring agency, and Abt Associates Inc., the research contractor in this research. During 1975-76 these school districts conducted their Title I programs under current federal Title I guidelines; certain aspects of these guidelines were waived for 1976-77 and 1977-78, and a number of unique and policy-relevant alternatives have been adopted.

This report describes findings derived from data obtained during 1975-76. It therefore provides information about Title I allocation within the 13 LEAs prior to the receipt of waivers, and as such, describes the various baselines from which allocation changes were made. Future reports will compare data gathered during 1976-77 and 1977-78 with these baseline data.

In addition to the senior authors, who shared overall responsibility for this document, a large number of individuals have made significant contributions.

Chapter 1, Introduction, was written by Ms. Nancy Ames. Chapter 2, Student Characteristics, was written by Dr. James Vanecko and Dr. Michael Hennessy. Ms. Leah Weiss provided them with valuable data management support.

Chapter 3, Student Experiences, was written by Dr. Francis Archambault and Dr. Robert St. Pierre. Dr. Glen Takata contributed valuable technical assistance in the design of the analysis. He was also responsible for the Classroom Activities Log reliability study, and for the Technical Appendix. Ms. Rosamund Ladner furnished much-appreciated data processing support.

Chapter 4, Program Delivery, and Chapter 6, The Context of the Demonstration, were prepared by a team of five analysts--Dr. D. Catherine Baltzell, Ms. Nancy Brigham, Ms. Nancy Ames, Ms. Jaime Grubin, and Mr. Ennio Mingolla. Overall coordination and guidance was provided by Dr. Baltzell, with the assistance of Ms. Brigham, under the supervision of Ms. Ames. Data processing assistance was supplied by Ms. Grubin and Mr. Mingolla. In addition, each team member had responsibilities for the conceptual development and drafting of one or more sections, particularly within Chapter 6.

Chapter 5, Community Reaction to Demonstration Policy Options, was written by Dr. James Vanecko and Dr. Michael Hennessy. Helpful suggestions on the organization of the chapter were offered by Dr. Francis Archambault and Ms. Nancy Ames.

Mr. Peter Miller and Mr. David Budding, in their roles as in-house reviewers of the project, also played a major part in the production of this report. The comments of Mr. Budding to early drafts were particularly helpful.

Overall data collection was coordinated by Ms. Julia Shepard. Ms. Ruth Scheer was responsible for the collection of parent data reported in Chapter 5. Ms. Ilana Rhodes and Ms. Marian Grogan monitored the efforts of District Research Coordinators at the Demonstration sites. Mr. Richard Ames and Mr. Lee Foster coordinated the instrument mailings and coding operations, assisted by Mr. Mahmud Rahman and other supporting staff. Mr. Michael Duvos and Mr. David Poppe maintained the data files necessary for the analysis presented in this report. Without all of these unselfish efforts and the splendid cooperation of the Demonstration districts, the research reported here would not have been possible.

Dr. Ann Milne of the National Institute of Education gave careful, critical, and fair review of early drafts of this report, as well as much-appreciated support and assistance throughout the development of the research plan.

Special recognition is also due Ms. Mary-Ellen Perry for typing and coordinating the many drafts of this report. Her cheerful response to the many demands is greatly appreciated, along with the valuable contributions of secretaries Ms. Jacqueline Thomas and Ms. Claudia Kelly.

EXECUTIVE SUMMARY

This report presents data from the first, or baseline, year of a three-year Study of Demonstration Compensatory Education Projects. Thirteen LEAs* participating in this study have been granted waivers of federal ESEA Title I regulations to establish "working models" of Title I allocation changes considered by Congress during deliberation on the Education Amendments of 1974. The "working models" developed by the majority of the LEAs incorporate two basic changes: 1) the use of achievement, rather than poverty, criteria to allocate resources; and 2) the distribution of services to a greater number of schools and/or students.

During the first year of the study, which has been designed to assess the effects of these allocation changes, the 13 LEAs operated under existing Title I regulations. Baseline data were gathered during this planning year, 1975-1976. This report focuses on the analysis of those baseline data. For 1976-77 and 1977-78, comparable measures will be obtained as districts implement their alternative funds allocation processes. Future reports will present data on the changes brought about by these alternative approaches:

Among the baseline measures described in this report are the following:

- Characteristics of students served by Title I and other compensatory programs within the Demonstration districts;
- Instruction and support services experienced by Title I and non-Title I students within the Demonstration districts;

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*"LEA" refers to Local Education Agency. The 13 participating in this study are: Adams County #12, Colorado; Alum Rock, California; Berkeley County, West Virginia; Boston, Massachusetts; Charlotte, North Carolina; Harrison County, West Virginia; Houston, Texas; Mesa, Arizona; Newport, Rhode Island; Santa Fe, New Mexico; Winston-Salem/Forsyth County, North Carolina; and Yonkers, New York.

- Organization and administration of compensatory programs and instructional services delivered within the Demonstration districts;
- Reaction of parents to proposed changes in Title I allocation policy and parent involvement in policy-making within the Demonstration districts; and
- Aspects of the State Education Agencies (SEAs) and LEAs that may have influenced the selection of alternative allocation options by the Demonstration districts.*

These measures have been chosen because they are deemed most likely to have an effect on or be affected by the allocation choices made by each of the LEAs.

The most general conclusion which may be drawn from the baseline information presented in this report is that current Title I allocation policy at the federal and state level permits substantial variation in the allocation of resources at the district level.

Under current rules and regulations, districts use a variety of criteria and procedures in determining which schools and students may be served, and which schools and students are actually served by Title I. Districts also vary in the manner in which resources are distributed among schools and students. Because decisions on the content of instruction and the delivery of services under Title I are delegated to the LEA, the characteristics of students served, their instructional experiences and the administration and organization of compensatory programs also differ substantially from district to district.

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*For a fuller discussion of the demographic characteristics of these LEAs, see Hubbell, B., G. Takata, and M. Hennessy, A Comparison of Demographic Characteristics of Demonstration Title I School Districts with National Estimates. Cambridge, Mass.: Abt Associates Inc., September 9, 1976.

For a detailed description of allocation policies chosen by each district, see Vanecko, J., F. Archambault, and N. Ames, ESEA Title I Allocation Policy: Demonstration Study--Implementation Decisions and Research Plans. Cambridge, Mass.: Abt Associates Inc., October 1977.

More specifically, the findings described in this report can be highlighted as follows.

Student Characteristics

The student characteristics data for 1975-76 reflect current regulations regarding within-district allocation procedures. Students in Title I schools are generally poorer than students in non-Title I schools. Title I students within Title I schools are also generally poorer readers than non-Title I students in these schools. Two additional correlates of Title I status appear to be race/ethnicity and sex, with minority students and males more apt to be program participants in these 13 districts.

Student Experiences

With regard to the services received by Title I students, the report focuses on instruction in reading and mathematics. Title I students are likely to receive more compensatory instruction but less regular instruction than non-Title I students. However, the sum of compensatory and regular instruction in each of these content areas is slightly higher for Title I children. Title I students also receive almost all compensatory instruction in small or medium-sized groups, while almost all regular instruction is delivered in medium or large groups. In addition, Title I students are likely to receive compensatory instruction from instructional specialists, while the same Title I students and their non-Title I counterparts are likely to receive regular instruction from classroom teachers. Thus, Title I services are supplementary to the degree that smaller class size and specialized teachers are more costly methods of instruction which are not part of the basic instruction provided by these LEAs.

Program Delivery

Despite variation among the Demonstration districts, the 13 LEAs as a group are quite similar in many respects to a

national probability sample of Title I districts.* Generally, Title I and State programs in the Demonstration districts provide both instructional and support services, but concentrate heavily on the former. Reading and language arts constitute the principal focus of the instructional effort, with mathematics, pre-kindergarten and ESL/bilingual activities being of lesser importance. Services are extended to children in a range of grade spans, but the major efforts are directed at grades 1-6.

With respect to instructional operations, a concise picture of an "average" elementary school can be constructed. An elementary child enrolled in this school's Title I reading and language arts program in the elementary grades in the Demonstration districts:

- receives 38 minutes of compensatory instruction for 4.6 days per week (175 minutes per week) during the entire school year;
- receives compensatory instruction in his/her regular school but outside his/her regular classroom, most likely in a room set aside for compensatory education;
- receives compensatory instruction in groups of two to ten students; and,
- receives compensatory instruction from specialists and/or aides.

Community Reaction to Demonstration Policy Options

A number of constituent groups in each district were questioned about the overall effectiveness of compensatory education programs and the various policy options available through Demonstration waivers. Across districts, the following results were found:

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*This sample of 100 districts is described in Evaluating Compensatory Education: An Interim Report on the NIE Compensatory Education Programs, Washington, D.C.: National Institute of Education, December 31, 1976.

- Principals, teachers, compensatory specialists, and parents all assessed the overall effectiveness of compensatory education programs positively.
- All groups preferred that student selection for Title I be based on achievement rather than on poverty criteria.
- All groups were relatively neutral in their support for either of two school selection options (i.e., concentrating compensatory services in schools with the greatest need versus providing services in all schools with some need).

The Context of the Demonstration

A number of characteristics may have influenced districts' participation in the Demonstration Study and/or the final choice of allocation strategy adopted during the implementation years. These include relatively fixed characteristics, such as demographic and organizational features of the LEAs, as well as more manipulable features, such as application and planning processes. Each of these is discussed at length in this report.

Demonstration districts appear to vary widely in size, geographic region, socioeconomic conditions, and organizational characteristics. As a group, however, they resemble the national probability sample of Title I districts with respect to demographic features. Several rationales underlie the districts' participation in the Demonstration Study, including:

- the desire to continue service to Title I type students who are relocated by desegregation;
- the desire to serve educationally disadvantaged students in non-poverty schools;
- the desire to eliminate inequities caused by lack of reliability/validity of available poverty indices;
- the desire to eliminate the "stigma" of Title I as a special-group program;
- the desire to use "more reasonable" (than poverty) achievement criteria; and
- the desire to make programmatic changes that increase the efficiency of instructional delivery.

1.0 INTRODUCTION

This report from the Study of Demonstration Title I Compensatory Education Projects concerns one component of the National Institute of Education's (NIE) Congressionally mandated Compensatory Education Study. The present report, which is one of a series, presents data from the first or baseline year of the study.

The Demonstration Study is comprised of Demonstration Projects in 13 Local Education Agencies (LEAs) and the research on the projects being conducted by Abt Associates Inc. This study is intended to produce evidence about the practical consequences of changes which have resulted from special waivers of federal Title I regulations granted to the LEAs for the within-district allocation of Title I funds. The projects themselves, and the waivers which made them possible, are based on specific provisions of the Congressional mandate for NIE's study. This mandate permitted NIE to establish "working models" of changes in the Title I allocation process considered by Congress during its deliberation on the Education Amendments of 1974. The "working models" developed by the districts have resulted in changes from the current poverty-based procedures for allocating Title I funds to a number of alternative procedures for determining school and student eligibility and for distributing Title I resources to schools and students.

The central purpose of the Demonstration research is to examine the effects of the alternative policies adopted by these LEAs to allocate funds to schools and to students within their districts. The research has two primary objectives. First, it is designed to document the ways in which the actual flow of Title I funds to schools and students changes as a result of the new funds allocation process. Second, it is designed to examine the relationship of these alternative allocation policies to 1) students served by the program, 2) the character and intensity of the services received by these students, 3) the reaction of the community

to the changed allocation policies, and ultimately 4) the effectiveness of Title I in improving the lot of children with learning problems.

To observe these relationships, a three-year study of the participating LEAs has been designed. During the first year of the Demonstration Study, the 13 LEAs operated under existing regulations. Baseline data were gathered during this planning year, 1975-76. In 1976-77 and 1977-78, comparable measures will be obtained as districts implement their alternative funds allocation processes. By comparing measures of the Title I program taken in the 1975-76 school year with those obtained in the two succeeding years, the changes brought about by these alternative funds allocation processes will be assessed.

Since this report describes various characteristics of the Demonstration Projects prior to the implementation of waivers, it complements the findings from the NIE National Survey of Compensatory Education.* Because more detailed information is available in the Demonstration Projects, this report is able to supplement the National Survey with data on the regular and compensatory instruction received by both Title I and non-Title I students in these LEAs.

The analysis of baseline data is essential to the analysis of change which will be presented in subsequent reports. Indeed, the first year data show that there are variations in program operation under current policy and, thus, there is not one but many baselines from which to examine change. The report is organized, therefore, to highlight first year data obtained on those measures central to the change analysis. Chapters 2 and 3 present baseline data on characteristics and instructional experiences of Title I students in the districts. Chapter 4 is devoted to a description of the compensatory programs operating in the LEAs, as designed by program administrators and implemented by Title I teachers. Chapter 5 describes the reactions

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*The National Survey of Compensatory Education provides data on Title I projects in a national probability sample of 100 school districts. (See Compensatory Education Services, Washington, D.C.: National Institute of Education, July 31, 1977.)

of parents and other community members to the Demonstration changes proposed during the planning year. Finally, Chapter 6 presents data on the setting in which the Demonstration Projects take place.

1.1 The NIE Compensatory Education Study

In the Education Amendments of 1974 (P.L. 93-380), Congress instructed the National Institute of Education to conduct a study of compensatory education, including compensatory programs financed by states and those funded under authority of Title I of the Elementary and Secondary Education Act. Section 821 required the following to be included in the study:

1. An examination of the fundamental purposes of such programs, and the effectiveness of such programs in attaining such purposes;
2. An analysis of means to identify accurately the children who have the greatest need for such programs, in keeping with the fundamental purposes thereof;
3. An analysis of the effectiveness of methods and procedures for meeting the educational needs of children, including use of individualized written educational plans for children, and programs for training the teachers of children;
4. An exploration of alternative methods, including the use of procedures to assess educational disadvantage, for distributing funds under such programs to states, to State Education Agencies, and to Local Education Agencies, in an equitable and efficient manner, which will accurately reflect current conditions and insure that such funds reach the areas of greatest current needs and are effectively used for such areas;
5. Not more than 20 experimental programs, which shall be reasonably geographically representative, to be administered by the Institute, in cases where the Institute determines that such experimental programs are necessary to carry out the purposes of Clauses (1) through (4)...;

6. Findings and recommendations...with respect to matters studied under Clauses (1) through (5).

In response to this Congressional mandate, NIE initiated a series of 35 research projects,* including, as authorized under Clause (5), a group of 13 Demonstration Title I Compensatory Education Projects.

Under existing regulations, LEAs are required to "target" Title I funds for schools which have high concentrations of low-income students, and within schools to serve students with the most severe educational problems. Thus, under existing policy Title I programs are concentrated on educationally disadvantaged students in schools with a relatively high (for the district) concentration of students from low-income families. Educationally disadvantaged students in other schools cannot receive Title I services.

Proponents of a shift to allocation on the basis of achievement criteria argue that it would result in better targeting of compensatory programs to the most academically needy. Opponents suggest that such a shift in policy may have the opposite effect, i.e., diluting the program for those currently served and shifting resources from those most in need of compensatory educational services to those with some, but less significant, educational problems. Theoretical arguments can be advanced to support a wide variety of predictions for the consequences of a change in district allocation policies. The major purpose of the Demonstration Study is to obtain information on the actual behavior of districts given the opportunity to remove existing restrictions.

While Demonstration districts were allowed to consider a number of new allocation processes, two major alternatives were

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*For a more complete description of the entire NIE study, see Evaluating Compensatory Education: An Interim Report on the NIE Compensatory Education Programs, Washington, D.C.: National Institute of Education, December 31, 1976.

chosen by the majority of the districts. These were: 1) the use of achievement, rather than poverty, criteria to allocate Title I resources; and 2) the distribution of services to a greater number of schools and/or students. Such basic changes may alter significantly the types of students served, the character and intensity of the services provided, or the degree to which Title I provides resources for effective compensatory programs in schools serving large numbers of poor students needing such help. The central focus of the study of the Title I Demonstration projects is thus to provide empirical information on the practical consequences of these alternative allocation policies for Title I.

With this central purpose established, seven research questions have been identified to guide the study, viz:

1. What changes in Title I allocation policy are made by each of the Demonstration districts under the waiver of federal regulations?
2. What effects do changes in Title I allocation policy have on the instructional and support services experienced by students of different types within the Demonstration districts?
3. What effects do changes in Title I allocation policy have on the characteristics of students served by Title I and the other compensatory programs within the Demonstration districts?
4. What effects do changes in Title I allocation policy have on the organization and administration of compensatory programs and the instructional services delivered within the Demonstration districts?
5. What is the reaction of parents to changes in Title I allocation policy within the Demonstration districts?
6. What effects do changes in allocation policy have on student achievement within the Demonstration districts?*

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*The fact that this question is relatively low on our list does not necessarily reflect its order of importance, but rather the limitations imposed upon our ability to answer it.

7. What are the costs and/or savings associated with changes in Title I allocation policy? What costs are non-recurring, such as those associated with planning, and what costs are recurring, such as those associated with testing and changes in program administration?

1.2 The Title I Demonstration Projects

The 13 LEAs involved in the Demonstration are:

Adams County #12, Colorado
Alum Rock, California
Berkeley County, West Virginia
Boston, Massachusetts
Charlotte-Mecklenburg, North Carolina
Harrison County, West Virginia
Houston, Texas
Mesa, Arizona
Newport, Rhode Island
Racine, Wisconsin
Santa Fe, New Mexico
Winston Salem/Forsyth County, North Carolina
Yonkers, New York

This section describes these LEAs and the changes in allocation policy which they are implementing during the 1976-77 school year. The former description provides the reader with a frame of reference. The latter description provides the reader with information concerning the departures that are likely to be made from the baseline data described in this report. Thus, it permits the reader to interpret the importance of the first year findings for change analysis.

The 13 LEAs were selected by NIE from among a group which wrote Demonstration proposals in the Spring of 1975. Thus, they are volunteers which were selected on the basis of proposal quality and regional distribution. In spite of this non-random selection process, the LEAs appear to be representative of a wide range of school districts. Their demographic characteristics are quite similar to those of the national

probability sample of LEAs.* Almost every region of the country is represented in the Demonstration Study which also includes urban, suburban, small city, and rural districts. The LEAs vary widely in size from Newport (6,165 students) to Houston (291,369 students). If anything, they underrepresent the smallest LEAs. Participating districts also vary in average income, the incidence of poverty, and the prevalence of minorities among their students. Thus, while it is not possible to treat these districts as a formal sample and to simply generalize to all school districts in the country from the results of this study, it is possible with careful analysis to draw inferences about the likely implications of varying policy options for a range of similar types of school districts.

Figure 1-1 illustrates the twelve stages in the Title I allocation process. Those parts of the process related to inter-district allocation, federal and state level allocation decisions, which are not altered in this Demonstration, are shaded over. Of the stages which are subject to change in this Demonstration Study (Stages 7 through 12), the most explicit changes made in all of the LEAs are those with regard to school eligibility.

During 1975-76, all of the Demonstration districts used poverty criteria to qualify schools. During 1976-77, nine of the districts elected to eliminate poverty as a determinant of school eligibility, two districts chose to use achievement criteria in conjunction with poverty criteria, and two districts chose to continue using poverty criteria exclusively. The districts may thus be grouped according to these general allocation policy choices.

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*For a fuller description of these demographic characteristics, see B. Hubbell, G. Takata, and M. Hennessy, A Comparison of Demographic Characteristics of Demonstration Title I School Districts with National Estimates, Cambridge, Mass.: Abt Associates, Inc., September 9, 1976.

FIGURE 1-1

STAGES IN THE ALLOCATION PROCESS FOR TITLE I ESEA FUNDS DISTRIBUTION

	Decision Level in the Allocation Process and Level of Administrative Responsibility	TYPE OF DECISION AND ACTION	STAGE
INTER-DISTRICT ALLOCATION	Decisions and Actions of the U.S. Commissioner Allocating Resources to States and to Counties — Level I	Eligibility of States for Funds	1
		Targeting of Funds to Eligible SEAs (Counties)	2
		Proportional Distribution of Resources to States and Counties	3
	Decisions and Actions of SEAs Allocating Resources to LEAs — Level II	Eligibility of LEAs Based on Distribution of Poor Students	4
		Targeting Eligible LEAs for Grants Based on Applications	5
		Proportional Distribution of Resources to Counties and Sub-counties. Redistribution of Excess Funds.	6
INTRA-DISTRICT ALLOCATION	Decisions and Actions of LEAs Allocating Resources to Schools — Level III	Eligibility of Schools Based on Concentration of Poor Students	7
		Targeting of Schools Based on Percent, or Number, or Both, of Poor Students	8
		Proportional Distribution of Resources to Targeted Schools in Order to Serve the Neediest and Concentrate Services Effectively.	9
	Decisions and Actions of School and Program Staff Allocating Resources to Students — Level IV	Eligibility of Students Based on Educational Disadvantage	10
		Targeting of Students Based on Greatest Need	11
		Proportional Distribution of Services According to Need	12

1. Direct Allocation

Seven districts are serving low-achieving children (variously defined by different districts) regardless of the school they attend. Therefore, the school is essentially bypassed in determining eligibility, and all schools within a given grade span are eligible for, and receive, services. Districts using this approach are:

- Adams County #12, Colorado (elementary grades 1-3)
- Alum Rock, California (elementary and middle schools)
- Harrison County, West Virginia (elementary schools)
- Mesa, Arizona (elementary, junior high, high schools)
- Newport, Rhode Island (elementary schools)
- Racine, Wisconsin (elementary schools)
- Santa Fe, New Mexico (elementary schools)

2. Ranking Schools by Achievement

Two districts are ranking schools on the basis of achievement, with all schools below a specified cutoff considered eligible for Title I services. As a result, some schools which were served previously are not receiving any Title I services in 1976-77, while other schools are receiving services for the first time. These districts are:

- Charlotte, North Carolina (all elementary schools with 35% or more of the students performing below the 30th percentile)
- Winston-Salem, North Carolina (all elementary schools with 40% or more of the students performing below the 35th percentile)

3. Ranking Schools by Poverty and Achievement

Two districts are ranking schools by both achievement and poverty criteria. These are:

- Boston, Massachusetts (all grade levels)
- Houston, Texas (elementary schools)

In Boston, the district ranked schools primarily by poverty and continues to serve schools qualifying under the criterion. The remaining schools were ranked by achievement and several are being

served on the basis of their achievement rank. In Houston, the district ranked schools primarily by achievement, but continues to serve schools which previously qualified by poverty criteria.

4. Ranking Schools by Poverty Exclusively

Two districts continue to rank schools exclusively by poverty. They are:

- Berkeley County, West Virginia (elementary schools)
- Yonkers, New York (elementary schools)

The explicit school eligibility policy changes made by these 13 LEAs result in explicit or implicit changes in each of the other five stages in the allocation process. These are described below and summarized in Table 1.1.*

Changes with regard to school targeting are essentially the same as those with regard to school eligibility. The LEAs first decided how many schools they wished to serve. The eligibility rules were then chosen in order to identify the same number of schools eligible as they would serve. Thus, there is no targeting of schools from among those eligible. Changes in the magnitude of elementary schools actually served in the Demonstration districts are outlined in Columns 1 through 5 of Table 1.1.

The percent of schools served in 1975-76 and 1976-77 is shown in Columns 1 and 2, respectively. The findings indicated by the figures in Column 1 were discussed in Section 2.6 of our report on allocation policy.** It is useful to note here that in spite of the fact that nearly all LEAs targeted all eligible schools under the old regulations, there is wide variation in the proportion of schools served. This was also true in the national probability sample which NIE studied.

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*For a fuller description of allocation policy under current regulations and the policies being adopted under the waivers, see J. Vanecko, F. Archambault, and N. Ames, ESEA Title I Allocation Policy: Demonstration Study--Implementation Decisions and Research Plans, Cambridge, Mass.: Abt Associates Inc., October 1977.

**Ibid.

Table 1.1

Allocation Policy Changes in the 13 LEAs Participating in the NIE Demonstration

LEAs GROUPED BY SCHOOL ELIGIBILITY POLICY OPTION / POLICY OPTION — LEA	MAGNITUDE OF SCHOOL TARGETING CHANGES BEING IMPLEMENTED					MAGNITUDE OF STUDENT TARGETING CHANGES BEING IMPLEMENTED			CHANGES IN AVERAGE DISTRIBUTION OF SERVICES TO STUDENTS ACROSS SCHOOLS
	1975-76 PERCENT OF PUBLIC ELEMENTARY SCHOOLS SERVED (1)	1976-77 PERCENT OF PUBLIC ELEMENTARY SCHOOLS SERVED (2)	CHANGE IN PERCENT 1975-76 TO 1976-77 (2)-(1) (3)	DEGREE OF DEPARTURE FROM 1975-76 TITLE I SERVICE* (3)/(1) (4)	DEGREE OF SATURATION ** FROM 1975-76 TO 1976-77 (3)/(100-(1)) (5)	NUMBER OF PUBLIC ELEMENTARY STUDENTS SERVED IN 1975-76 (6)	NUMBER OF PUBLIC ELEMENTARY STUDENTS SERVED IN 1976-77 (7)	PROPORTIONAL CHANGE ((7)-(6) /(6) (8)	CHANGE IN AVERAGE NUMBER OF STUDENTS SERVED BY SCHOOL (9)
DIRECT STUDENT ALLOCATION									
Adams County	19%	100%	81%	433%	100%	174	693	240%	- 21
Alum Rock	47%	100%	53%	100%	100%	3,902	9,560	141%	91
Harrison County	83%	100%	17%	20%	100%	1,409	1,823	29%	5
Mesa	56%	100%	44%	79%	100%	2,494	3,229	29%	- 49
Newport	33%	100%	67%	200%	100%	175	445	154%	- 9
Racine	55%	100%	45%	82%	100%	760	1,552	104%	- 1
Santa Fe	69%	100%	31%	45%	100%	735	1,149	56%	5
RANKING BY ACHIEVEMENT									
Charlotte	67%	76%	9%	13%	27%	6,440	6,156	- 4%	- 23
Winston-Salem	35%	65%	30%	86%	46%	1,812	3,310	83%	- 1
RANKING BY ACHIEVEMENT PLUS POVERTY									
Boston	56%	69%	13%	23%	30%	10,130	10,572	4%	- 13
Houston	32%	34%	2%	6%	2%	19,518	17,854	- 9%	- 53
RANKING BY POVERTY									
Berkeley County	77%	79%	2%	3%	9%	630	1,106	76%	38
Yonkers	29%	36%	7%	24%	10%	2,315	2,855	20%	53

*This measures the expansion of Title I services using the number of schools served in 1975-76 as a base. If five schools are served in 1975-76 and five added in 1976-77, the figure will be 100%.

**This measures the expansion of Title I services as a percent of all schools which could be added, i.e., all schools not served by Title I during 1975-76.

Indicators of the magnitude of change in the number of schools served are included in Columns 3-5.* Column 3 provides the simple subtraction of the first percent from the second percent. Column 4 shows the ratio of the percent in Column 3 to the percent of schools served in 1975-76. If five schools were served by Title I in 1975-76, and five added in 1976-77, this indicator would be 100 percent. This indicator of the magnitude of change provides an estimate of how much organizational, administrative, and distributional change is being undertaken within the Title I program. Column 5 shows this same change as a proportion of the possible change that could have been made. If ten schools were not served in 1975-76, and five of those were served in 1976-77, this figure would be 50 percent. Thus, this measure indicates the degree to which schools, principals, teachers, and parents who were not previously affected by Title I will now participate. This indicator provides an estimate of the adjustment required by the school district actors and organizations outside of Title I.

Indicators of the magnitude of change with regard to student targeting are displayed in Columns 6, 7, and 8. Again, as with schools, eligibility and targeting decisions are merged. Decisions are made about the students to be served, and eligibility rules are stated to correspond with these decisions. Columns 6 and 7 provide the numbers of students served in 1975-76 and in 1976-77, respectively. Column 8 indicates the proportional change in students served. In all cases but two (Charlotte and Houston), an increased number of students is being served during the Demonstration. From these data one might be able to predict changes in both the amount of instructional services received by the students who are served and the characteristics of those students. Stated simply, one would expect serving more students to result in less instruction for each.** Depending on the distribution of students among schools, one would expect serving more students to result in services for more of the needy.

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*Ibid. The changes represented in Columns 3 through 9 are discussed in Section 2.9 of the report on allocation policy.

**This, of course, presumes that the total allocation of Title I dollars to the LEAs remains constant over the two years.

The change in the average number of students served per school is presented in Column 9. The estimates provided in the previous columns indicate the organizational, administrative, and distributional changes to be made by the school district across the Title I program. This column indicates the internal adjustments that will have to be made by schools receiving Title I services. It also provides a basis from which to consider likely changes in the characteristics of students served. If the most educationally needy children are distributed fairly evenly among schools, and the neediest children are served first, then the fewer students served per school and the more schools served, the more needy students served. If the most educationally needy students are concentrated in the schools already being served, then such changes are likely to result in a smaller proportion of the most needy students being served.

In summary, there is variation around the average number of students served per school within each of the districts. The amount of variation is relatively small in some districts and large in others. The degree to which the amount of Title I dollars allocated to individual schools correlates with the number of students eligible or the number of students served also varies. In general, the result of the Demonstration changes has been to institute a more uniform allocation to schools based on the number of students eligible for Title I services.

One would predict that changes in the characteristics of students served and the amount and type of services which students receive will vary across districts. This is because policies and their outcomes under existing regulations vary. It is also because the alternative school eligibility policies adopted and their concommitant changes in other stages of the allocation process vary. With the knowledge of these changes, one can develop hypotheses about likely differences between the results of current allocation policy options as described in this report and the results of new allocation policies which will be analyzed in future reports.

1.3 Analytic Model and Methods

Figure 1-2 presents the analytic model used in this study. It is a simplified model indicating the specific linkages between allocation policy changes and various outcomes as well as the exogenous factors likely to constrain policy impact and the intervening processes between policy and outcomes. Each box in the model represents a group of related variables. The lines connecting the boxes in the model represent the links between the variable groups that will be analyzed in the Demonstration Study.

Variable groups to the left of Group C represent contextual variables which may influence allocation changes. Setting (Group A) refers to the characteristics of the State and Local Education Agencies, as well as the individual schools participating in the study. Application/Planning (Group B) addresses the ways in which school districts applied for and were accepted into the study, as well as the ways in which school districts planned their projects.

Variables to the right of Group C represent potential outcomes of allocation policy changes. The most critical outcomes of the research are the characteristics of students served (Group F) and the nature of the compensatory services experienced by those students (Group E). Since changes in these outcomes are likely to be mediated by changes in program design, program delivery (Group D) is also a central component in the model. Finally, community reaction to the Demonstration (Group H) is an additional outcome of interest.*

In order to measure the variables indicated by this model and to analyze the linkages between its various components, a hybrid approach to data collection and analysis was

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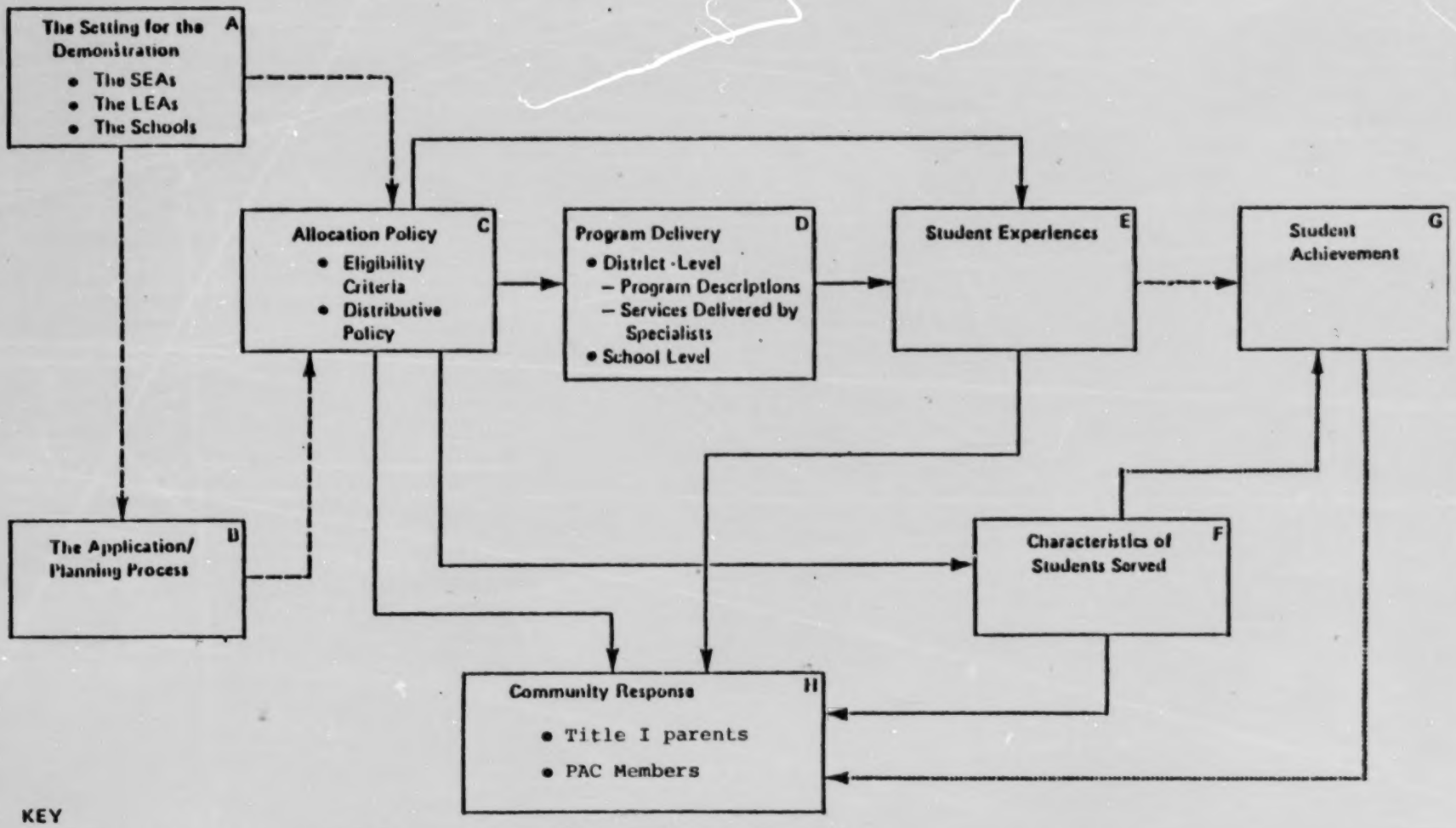
*While student achievement (Group G) is included in the model, study limitations prevent direct testing of this final linkage. Data from other components of the NIE study, however, may shed light of the relationships among student characteristics, student experiences, and student achievement.

FIGURE 1-2

THE ANALYTIC MODEL FOR RESEARCH ON DEMONSTRATION COMPENSATORY EDUCATION PROJECTS



required. With regard to data collection, some of the variables required standardized measurement with quantitative indicators, e.g., those included in boxes E, F, and G. Some were measured only qualitatively, e.g., those included in Box B. Still others were measured in both ways, e.g., A, C, D, and H. With regard to data analysis, a few of the linkages were analyzed only qualitatively, and many were analyzed only quantitatively. However, most were analyzed using both techniques.*

Qualitative data were gathered primarily through what we have called the site description effort. These data were collected by 1) reviewing existing district documentation, and 2) conducting informal face-to-face interviews on site with key district administrators. Data for the statistical analyses were gathered primarily by means of self-administered questionnaires and face-to-face interviews. Information was collected from elementary school principals and compensatory education specialists, third and fourth grade homeroom and subject matter instructors, parents of selected students, and members of the Title I PACs. No information, including achievement data was collected directly from sample students.

Given the nature of the questions and the analytic model which guide this research, the sample selected for this study, the data collection instruments, and the data collection procedures are all complex. In this section, we present a brief overview of each of these considerations. More detailed information about them is presented in appropriate later sections of this report and in Appendix D.

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*One of the major advantages of using qualitative data is that it broadens the interpretation of the quantitation results through illustration, specification, conceptual clarification, and typological distinction. These advantages are discussed most persuasively in a recent unpublished paper by the late Paul Lazarsfeld, The Use of Qualitative Case Studies in Studying the Implementation of Federal Policies, Learning Research and Development Center, University of Pittsburgh, 1976.

The first stage in sampling, which was undertaken to support site-level analyses, was to identify school types. School types were defined by whether or not Title I services are provided within a school under the old Title I allocation policy (1975-76) and under the new policy (1976-77). Within identified strata, schools were sampled according to a uniform precision rule. Within sample schools, information was collected from all classrooms containing third or fourth grade students. Within such classrooms, two students were sampled for in-depth consideration. With one or two exceptions, all quantitative data was linked to these sample students. The teachers who taught them reading and mathematics provided information on instructional practices. Their parents were interviewed to obtain income and other information. Principals of their schools provided contextual information about the various programs offered to them.

Table 1-2 summarizes the formal instrumentation employed in the Demonstration Study. Columns 2 to 6 present the format, sample, level of data, and primary and secondary objectives for each instrument. Column 7 presents the variable groups in the analytic model to which the instruments are linked. A description of the actual variables used in these analyses can be found in subsequent chapters of this report and in more detail in the appendices.

All analyses described in this report were conducted within site. These within-site results were then linked to variations in policy dimensions across sites. For most variable groups, simple descriptive statistics were employed. In the case of student characteristics and experiences, however, a more complex analytic procedure was utilized. This procedure was designed to determine whether the baseline year data were a function of school eligibility and targeting decisions, student eligibility and targeting decisions, or both.

TABLE 1-2

FORMAT, SAMPLE, LEVEL OF DATA, PURPOSES, AND
PRIMARY VARIABLE GROUPS FOR FORMAL INSTRUMENT DATA SOURCES

DATA SOURCE	FORMAT	SAMPLE	LEVEL OF DATA*	PRIMARY OBJECTIVE	SECONDARY OBJECTIVE	VARIABLE GROUP(S)
Principal Questionnaire: Form I	Self-Administered Questionnaire	All Elementary School Principals in Demonstration Districts	District School	To obtain a thorough description of the compensatory program(s) operating in each school	To obtain a description of school and facilities professional staff, and other contextual characteristics, as well as professional response to the Demonstration	A, D, H
Principal Questionnaire: Title I Supplement	Self-Administered Questionnaire	Principals of all elementary schools currently served by Title I	District School	To obtain a thorough description of the Title I services provided in each school	To obtain information regarding criteria and procedures used in determining Title I eligibility as well as information about planning	B, C, D
Principal Questionnaire: State Compensatory	Self-Administered Questionnaire	Principals of all elementary schools currently served by ISFCE	District School	To obtain a thorough description of the state-funded compensatory services provided in each school	To obtain information regarding criteria and procedures used in selecting students for state-funded compensatory programs, as well as information about planning	B, C, D
Teacher/Reading and Math Specialist Questionnaire Form I (Background)	Self-Administered Questionnaire	All sample teachers and specialists	Teacher/Specialist	To obtain information on staff opinions regarding compensatory education	To obtain information on staff background characteristics and opinions regarding compensatory education	A, D, H
Regular Program Description Modules Forms IV and IVA	Self-Administered Questionnaire	Regular language arts and mathematics teachers of sample students	Instructional Unit	To obtain a description of the regular reading and mathematics instruction provided to sample students		H
Compensatory Program Description Modules Form III	Self-Administered Questionnaire	All compensatory language arts and mathematics specialists; providers of compensatory language arts and mathematics to sample students	Instructional Unit	To obtain a thorough description of the compensatory reading and mathematics instruction provided to sample students	To obtain information on the services delivered by compensatory language arts and mathematics specialists	D, H
Classroom Activities Log (CAL)	Self-Administered Record Form	All sample students	Student	To obtain an estimate of the actual amount of instruction received by each student group	To obtain an estimate of the actual instructional setting in which students receive instruction	
Classroom Roster	Self-Administered Record Form	All homeroom (primary) teachers in third and fourth grade classrooms in sample schools	Student	To obtain an unduplicated estimate of the characteristics of students participating in Title I and other compensatory programs	To facilitate student sampling procedures	F
Instructional Schedule	Self-Administered Record Form	All compensatory language arts and mathematics specialists	Specialist	To estimate the amount of time specialists spend in direct instruction in various programs	To facilitate specialist sampling procedures and form distribution	D
Student School Record Information Form (SSRIF)	Self-Administered Record Form	All sample students	Student	To obtain standardized achievement test scores on sampled students as well as an unduplicated count of services received from Title I and other compensatory programs	To obtain information on other student characteristics and amount of support services	E, F
Parent Interview	Face-to Face Interview	All parents of sampled Title I students	Parent	To estimate the socioeconomic characteristics of Title I students	To obtain information on the involvement, knowledge, and preferences of Title I parents	F, H
Parent Advisory Council Interview	Face-to-Face Interview	Members of Parent Advisory Council	PAC	To obtain information on involvement, knowledge and preferences of PAC members	To obtain information on structure and organization of PACs	H
Citizen Telephone Survey	Telephone Interview	Local Citizens	Citizen	To determine if the changes in allocation criteria produce a reaction in the general community	--	H

Essentially an analysis of variance, the technique contrasted the differences between Title I versus non-Title I students and Title I versus non-Title I schools. More detail is provided in Appendix D on the analytic procedures employed.

2.0 STUDENT CHARACTERISTICS

2.1 Research Objectives and Major Conclusions

It is very likely that the characteristics of students served by Title I will change as the result of changes in school eligibility and targeting procedures and/or changes in student eligibility and targeting procedures. If student participation is determined entirely by achievement, for example, it is possible (although by no means assured) that the proportion of poor students served by Title I will decline during the implementation years of the Demonstration. It is also possible that as more schools (serving varying population groups) are added, the characteristics of Title I students may change, independent of any change in within-school selection criteria.

With these and other possible consequences of the Demonstration in mind, the basic questions to be addressed in examining student characteristics are:

- Do different types of students receive Title I services as a result of different allocation policies for Title I funds?
- If so, is this a function of the student selection process, the school selection process, distribution of services to more schools and students, or some interaction?*

In this chapter, the characteristics of Title I students during the baseline year (i.e., before the granting of waivers) are examined. Describing the characteristics of

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*These questions refer to the results of change. However, as we have pointed out in a previous report (J. Vanecko, et al., op. cit.), within current regulations there is relatively wide latitude for LEA policy decisions in regard to school eligibility, school targeting, student eligibility, and student targeting. Thus, this analysis not only examines the results of change but also contrasts the results of different policies under current regulations.

students during the baseline year not only sets the stage for the analysis of the basic research questions, but also serves two additional purposes. These are:

- to examine the extent to which stated allocation policies (for 1975-76) are reflected in the characteristics of students served by Title I; and
- to examine the extent to which student characteristics in 1975-76 suggest likely results of policy changes.

For each of these purposes, the analysis is designed to compare the resultant characteristics of students as a function of school selection policies and as a function of student selection policies within schools. The student types which are compared are:

- students who are served by Title I;
- students who are in Title I schools but not served (because of student selection policies); and
- students in non-Title I schools (who are not served because of school selection policies).

Of course, the characteristics of students actually served during both the baseline and implementation years may be a function of several things in addition to stated policy. These include the overall composition of students in the district and their distribution across schools, as well as the extent to which intended policies are implemented in practice. Although it is not possible to completely disentangle these factors, the data presented here do describe their net effect in 1975-76 and suggest hypotheses about the changes in characteristics of students to be served in 1976-77. They also suggest factors, other than allocation policy, which could influence the types of students served.

The findings presented in this section may be summarized briefly in two major points:

- The stated allocation policies for 1975-76 appear to have been implemented in the Demonstration sites.

- The likely results of the Demonstration changes are dependent on factors external to the Demonstration itself (e.g., the overall proportion of students with specific characteristics and the distribution of such students across schools), as well as on the Demonstration policy choices of the LEAs.

The first major point is made on the basis of two findings:

- In all sites except Alum Rock, a significantly greater proportion of Title I students in Title I schools were low achieving than their non-Title I counterparts. These data reflect the fact that in these sites student eligibility and targeting decisions were based primarily on educational need.* (See Table 2.2)

- In all sites, a greater proportion of students in Title I schools than in non-Title I schools participated in the free lunch program. These data reflect the fact that school eligibility and targeting decisions were based on economic criteria in all sites during the baseline year. (See Table 2.3.) Similar results are obtained in the analysis of other poverty measures (using actual income and applying the Orshansky Index.)

There is one summary finding pertaining to the second major point.

- In all sites except Yonkers, the differences in average achievement scores between types of students within schools are greater than the differences across schools, which are uniformly small. Thus, any increase in the number of schools served by Title I should result in Title I service being delivered to students with a lower average achievement score, if the number of students served per school decreases and districts first serve students most in need.

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*In Alum Rock, student targeting for Title I services was based on educational need. However, the within-class program in this site, in contrast to the pull-out programs in other sites, allowed for more variation in targeting decisions.

There are three more specific findings pertaining to the second major point.

- In almost all direct allocation sites, the within-school and across-school differences in students receiving free lunch are relatively large and approximately equal. There are relatively small differences across schools in achievement levels for these sites. Thus, serving more schools might result in the selection of fewer students from poor families, but the average achievement scores of newly served students are likely to be the same or lower than previously served students.
- In the sites substituting achievement eligibility of schools for poverty eligibility (Charlotte and Winston-Salem), the across-school differences in poverty indicators are uniformly small, as are the across-school differences in percent minority. Since these sites anticipate a small change in number of schools served, as well as a slight decrease in numbers of students served per school, the likely result of Demonstration changes is to maintain similar proportions of poor and minority students among those receiving Title I services.
- In Houston and Yonkers, the differences between schools in both proportion poor and proportion minority are high. Schools not now receiving Title I are richer and have smaller proportions of minority students. Thus, even small changes in the proportions of schools served could result in smaller proportions of poor and minority students among those served by Title I.

2.2 Method

2.2.1 Instruments and Variable Groups

Results presented in this chapter were based on data drawn from three different instruments and two respondent groups--teachers and parents. A description of the data sources and specific variables utilized may be found in Appendix A. Briefly, the teacher forms included a Classroom Roster, completed for the universe of students in sample classrooms, and a Student School Record Information Form (SSRIF), completed for a small sample

of the rostered students. Parent data were collected for the majority of the students in the latter group. From these data sources, the following variables were derived:

- poverty, as measured by a number of different indices;
- reading achievement;
- race/ethnicity;
- sex; and
- participation in other compensatory programs.*

Although the Roster provides information on the greatest number of students, it provides the least restrictive definition of poverty--free lunch participation. The Roster also provides only an estimate of achievement, based on teacher judgment of students' performance in reading. This measure is a useful estimate, however, because it applies a standard cut-off level for purposes of analysis.** In practice, districts utilize a variety of tests, cut-off levels, and procedures in determining which students are served. Teacher estimates also correlate strongly with actual achievement test scores in these districts. By-site correlations range from .58 to .76, with a median of .67.

2.2.2 Samples and Analytic Techniques

The basic sampling plan was highlighted in Chapter 1 and is described in detail in Appendix D. The design for each district evolved from the allocation plan chosen by the district and the school types which emanated from this plan. Briefly, the design incorporates both Title I and non-Title I students from at least one school type in each district, i.e., schools

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*For a definition of each of these variables, see Appendix A, Table A-4.

**Low achievement was defined as reading one year or more below grade level. This criterion, while somewhat arbitrary, has a referent in Section 417(a)(2) of the General Education Provisions Act. This section states that for the purposes of the Secretary of Health, Education and Welfare's Annual Report, the term "educationally disadvantaged" children refers to children who are achieving one or more years behind the achievement expected at the appropriate grade level for such children.

which are Title I and schools which are not in 1975-76. For six of the 13 districts it also includes a number of additional school types. The specific sample groups and the numbers of students and parents available for the analyses of student characteristics are presented in Tables A-1 through A-3 of Appendix A.

For all sites, two basic comparisons were made: 1) between Title I and non-Title I students within Title I schools, and 2) between Title I and non-Title I schools. The first comparison was designed to examine the effects of student eligibility and targeting decisions on the characteristics of students served; the second, the effects of school eligibility and targeting decisions. In addition to these analyses, additional comparisons were made when more than one type of Title I school existed in a site. These comparisons address issues of particular concern for the site.

The remainder of this chapter is devoted to amplifying the basic findings. Additional site-specific concerns are discussed in Appendix A.

2.3 Findings

2.3.1 Variations in Student Composition Within and Across Districts

The purpose of this section is to provide an overview of variations in student composition within and across districts. Three variables are described here: poverty status,* achievement, and race. These descriptions are intended to provide a reference for the comparative analyses which follow. A companion set of figures for the other student characteristic variables may be found in Appendix A, Figures A-1 through A-4.

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*Only free lunch is presented here. An examination of the poverty threshold based on family income shows similar results with some significant exceptions.

Poverty Status

Figure 2-1 displays the proportions of students participating in the free lunch program for three student groups: Title I students in Title I schools, non-Title I students in Title I schools, and non-Title I students in non-Title I schools. As can be seen, districts vary in both the overall proportions of students receiving free lunch and the proportions receiving free lunch in each group. In Adams County #12, Mesa, and Racine for example, relatively small proportions of students participate in the free lunch program overall. (The highest proportion in these sites is 44% for any single group.) In contrast, Alum Rock and Boston have high proportions of students receiving free lunch assistance overall. (The lowest proportion in these sites is 59% for any group.)

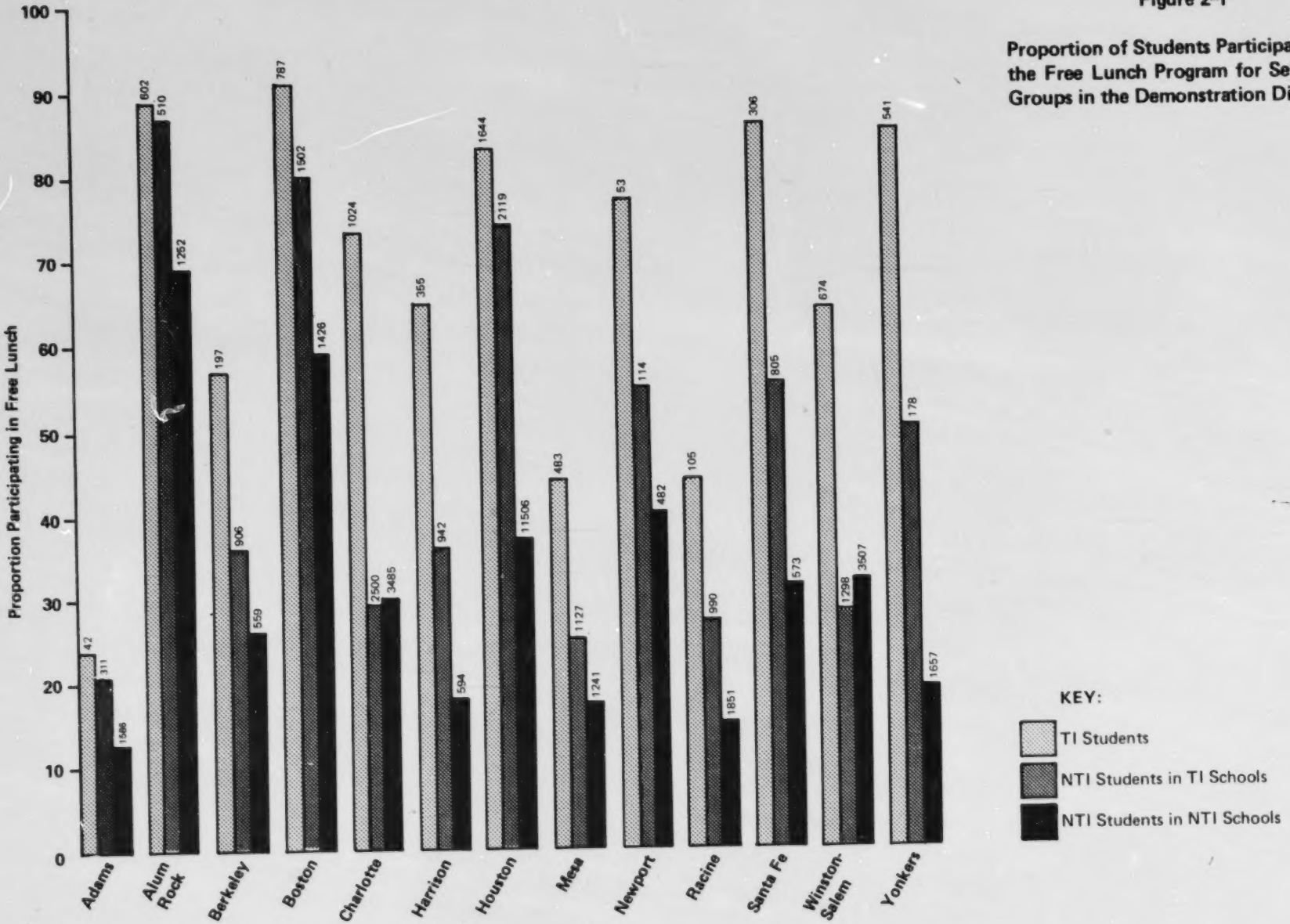
For all sites but two, the proportion of students receiving free lunch is highest for the Title I students in Title I schools, next highest for the non-Title I students in Title I schools, and lowest for the non-Title I students in non-Title I schools. The two exceptions are Charlotte and Winston-Salem, where the latter two groups are approximately equal. The magnitude of the differences between these groups varies widely across sites, however, and is the subject of the comparative analyses described in Sections 2.4 and 2.5 below.

Achievement

Figure 2-2 displays the proportions of students who are low achieving in each site, where low achievement is defined as reading one or more years below grade level, according to teacher judgment. The weighted average computed for the three groups in each site reveals that overall differences in achievement levels across districts are less marked than they are for free lunch. Most sites have between 20% and 30% of their students in the low-achieving category, on the average. Only Alum Rock, with approximately 48% low achievers, and Houston, with approximately 38% low achievers, appear to be outside this range.

Figure 2-1

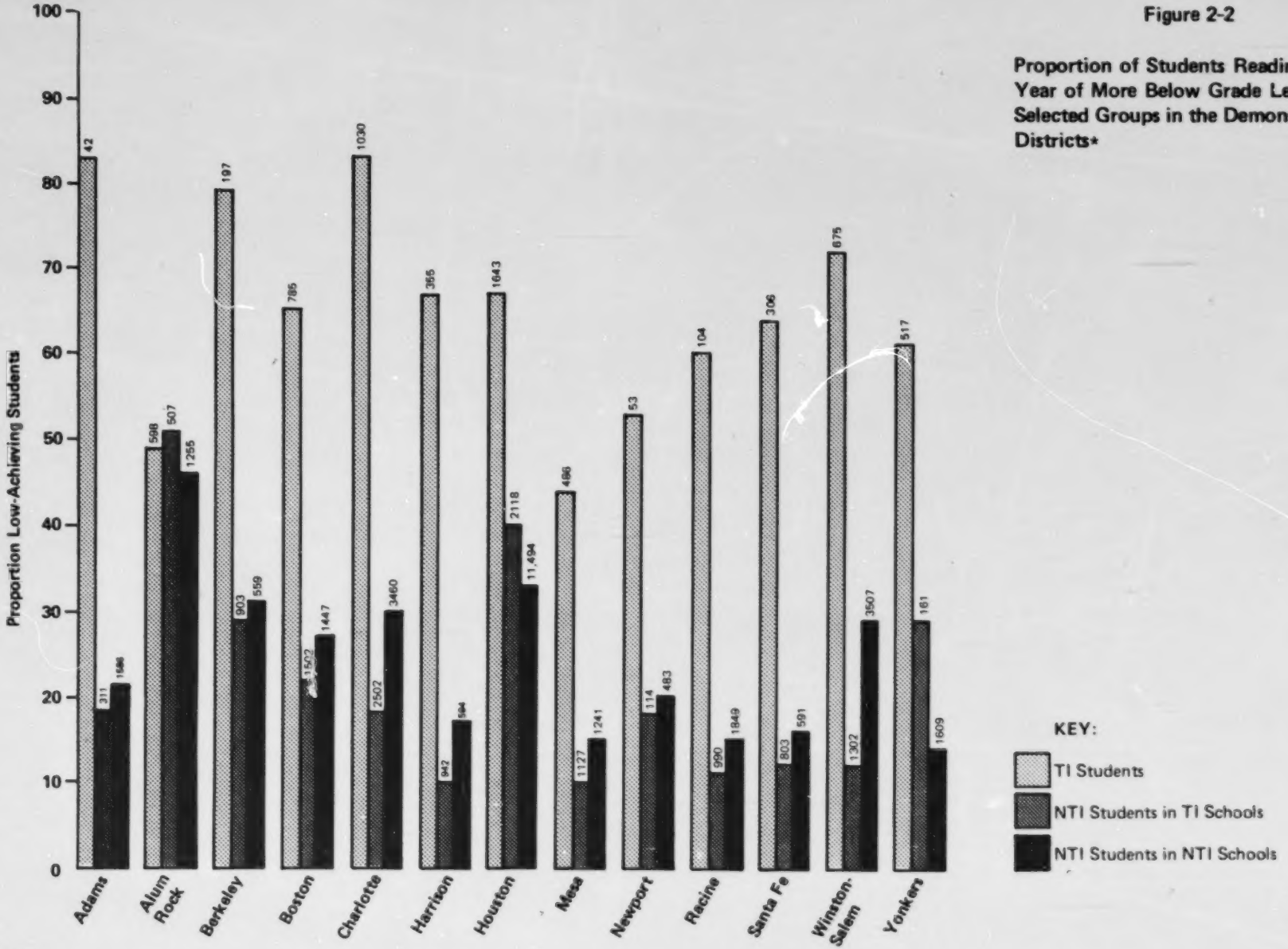
Proportion of Students Participating in the Free Lunch Program for Selected Groups in the Demonstration Districts *



* Numbers at the top of each column refer to sample sizes.

Figure 2-2

Proportion of Students Reading One Year of More Below Grade Level for Selected Groups in the Demonstration Districts*



*Numbers at the top of each column refer to sample sizes.

Differences in achievement between Title I students and both non-Title I student groups are dramatic in all sites, with the exception of Alum Rock. Differences between the non-Title I groups are less consistent. Once again, specific comparisons will be discussed below.

Race/Ethnicity

Figure 2-3 presents for all sites the proportions of students in each group who are minority group members. The greatest overall variation among sites can be seen with respect to this variable. Berkeley County and Harrison County each have very few minority students (10% or less in each group). Adams County #12, Mesa, Newport, and Racine also have relatively small proportions of such students. In contrast, Alum Rock, Boston, Houston and Santa Fe all have relatively high proportions of such students.

Within-site variation among student groups also varies across sites. Adams County #12, Berkeley County, Harrison County, and Newport have relatively small proportions of minority students in all three Title I/non-Title I student groups. The relatively small proportions of minority students in these sites, in general, account in large part for this lack of variation. In contrast, several other sites have marked differences between groups, with Charlotte, Houston, and Yonkers being three obvious examples. School type comparisons for race/ethnicity are also discussed in more detail in the sections below.

Combination of Poverty and Achievement

Figure 2-4 displays the proportions of students with all four possible combinations of poverty and achievement characteristics for the selected groups of interest.* This figure can be used to address the question, "What are the differences in student characteristics within and across sites?" These differences may be summarized as follows:

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*Poverty status in this case is based solely on free lunch participation.

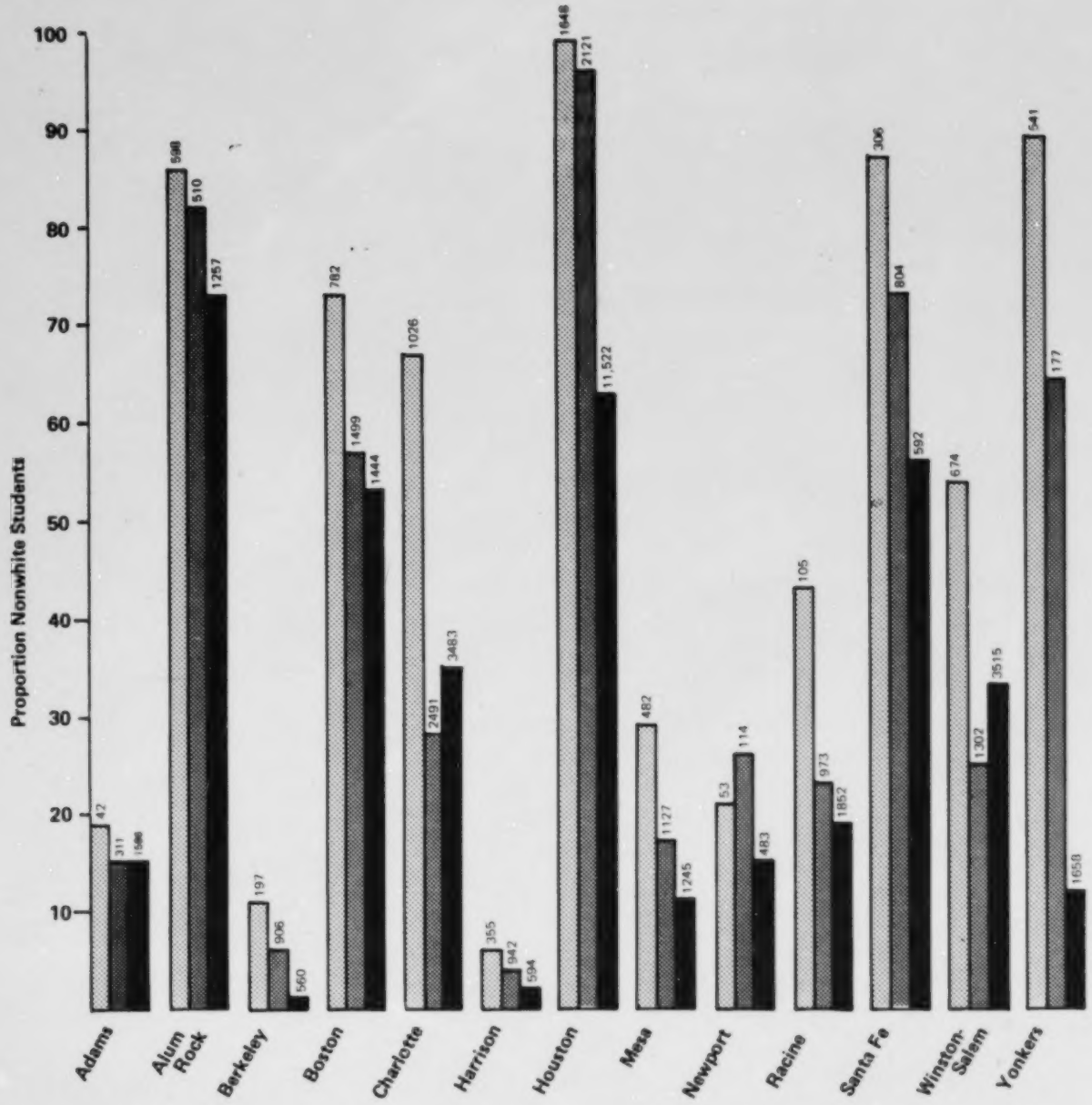

Figure 2-3

Proportion of Minority Students for Selected Groups in the Demonstration Districts *

*Numbers at the top of each column refer to sample sizes.

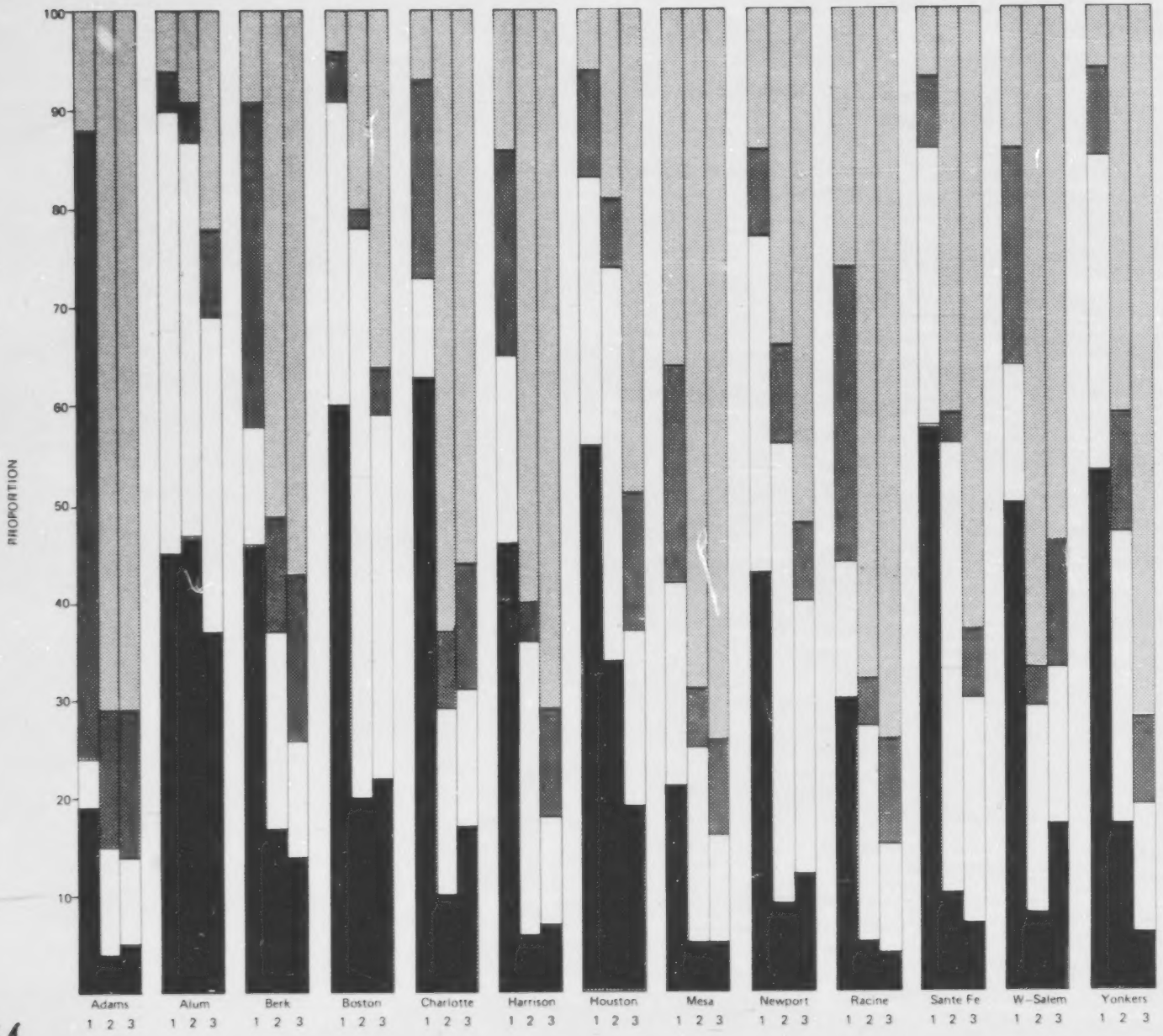

FIGURE 2–4
POVERTY AND ACHIEVEMENT CHARACTERISTICS OF STUDENTS FOR SELECTED GROUPS IN THE DEMONSTRATION DISTRICTS*

* Low achieving is defined here as students reading one or more years below grade level. "Poverty" here refers to students who are eligible for free lunch.

- As one might expect, for 12 of the 13 sites there are greater proportions of Title I students than non-Title I students (in either Title I or non-Title I schools) who are both poor and low-achieving. The only exception is Alum Rock, where the difference between groups is generally small.
- In all cases, a greater proportion of students in non-Title I schools are non-poor and non-low achieving than Title I students in Title I schools. In ten out of 13 cases, the proportion of non-poor and non-low achieving students is higher for the non-Title I students in non-Title I schools than for the non-Title I students in Title I schools.
- The proportion of non-poor and low-achieving students is generally small across all groups. Only Berkeley County, Racine, and Adams County #12 have 30% or more of such students in any group.
- In general, the proportion of poor and high-achieving youngsters is also small. Only Alum Rock, Boston, Newport, Santa Fe, and Yonkers have more than 30% of such students in one or more groups. In ten of the 13 districts, the proportion of poor and high achieving students is greatest for the non-Title I students in Title I schools.
- The proportion of poor and low-achieving students among Title I participants varies widely across districts. In Boston, Charlotte, Houston, Santa Fe, Winston-Salem, and Yonkers it is over 50%. In Adams County #12 and Mesa, in contrast, it is approximately 20%.
- There is also wide variance in the proportions of Title I participants with the other combinations of poverty and achievement characteristics. This suggests that allocation changes are being made from quite differing bases.
- The proportion of non-Title I students in Title I schools who are both poor and low achieving is generally small (less than 20%), with the exception of Alum Rock (47%). The fact that there are some students in this category in all sites, however, suggests that current student eligibility and targeting procedures may not be reaching all students in need.
- The proportion of poor and low achieving students in non-Title I schools is less than 20% in all sites but Alum Rock and Boston, where it is 37% and 22%, respectively.

- The proportion of non-poor and non-low achieving students in non-Title I schools is roughly 50% or more in all sites but Alum Rock and Boston. In five sites, it exceeds 70%.

Table 2.1 displays the probabilities of the three types of Title I/non-Title I students being (1) low achieving and poor; and (2) low achieving and not poor. Probabilities are based on the proportions outlined in Figure 2-4, using students in non-Title I schools as a base. Table 2.1 can be used to answer the question, "What is the relative probability of schools and students served by Title I having specific characteristics?" The probabilities displayed in Table 2.1 may be summarized as follows:

- In all sites except Alum Rock and Adams County #12, the probability of students being both poor and low achieving is highest among served students. In seven sites, this probability is higher for students who are in Title I schools but not selected to be served than for students who are in non-Title I schools. In five other sites the opposite is true. In one, this probability is the same for both types of students who are not served.

- In all sites but three, the probability of students who are served being low achieving but not poor is higher than for those students who are in non-Title I schools. In the remaining sites it is equal in Santa Fe, relatively close in Houston, and much lower in Alum Rock. The probability of students being low achieving but not poor is lower among students who are in Title I schools but not served than for students in non-Title I schools in all sites except Newport and Yonkers.

2.3.2 Cross-Site Student and School Type Comparisons

Tables 2.2 and 2.3 present cross-site summaries for two basic comparisons. In Table 2.2, the characteristics of Title I and non-Title I students within Title I schools are compared. In Table 2.3 the characteristics of students in Title I and non-Title I schools are compared. In the second comparison, Title I and non-Title I students in Title I schools are treated

TABLE 2.1

COMPARISON OF THE PROBABILITIES OF STUDENTS HAVING SPECIFIC ACHIEVEMENT LEVELS* AND POVERTY LEVELS** FOR THREE STUDENT GROUPS: STUDENTS SERVED BY TITLE I, STUDENTS IN TITLE I SCHOOLS WHO ARE NOT SERVED, AND STUDENTS IN SCHOOLS WHICH ARE NOT SERVED BY TITLE I

	RATIO OF THE PROBABILITIES*** FOR STUDENTS BEING BOTH LOW ACHIEVING AND POOR			RATIO OF THE PROBABILITIES*** OF STUDENTS BEING LOW ACHIEVING AND NOT POOR		
DISTRICT	Students Served By Title I	Students in Title I Schools Not Served	Students in Non-Title I Schools	Students Served By Title I	Students in Title I Schools Not Served	Students in Non-Title I Schools
Adams County #12	3.80	.80	1	4.27	.93	1
Alum Rock	1.21	1.26	1	.44	.44	1
Berkeley County	3.29	1.21	1	1.94	.71	1
Boston	2.73	.91	1	1	.40	1
Charlotte	3.71	.53	1	1.54	.62	1
Harrison County	6.57	.85	1	1.91	.36	1
Houston	2.95	1.79	1	.79	.50	1
Mesa	4.20	1	1	2.20	.60	1
Newport	3.58	.75	1	1.13	1.25	1
Racine	7.50	1.25	1	2.73	.46	1
Santa Fe	8.29	1.43	1	1.00	.43	1
Winston-Salem	3.00	.45	1	1.75	.35	1
Yonkers	9.56	3.16	1	1.02	1.39	1

*"Low Achieving" here refers to students reading one or more years below grade level.

**"Poverty" here refers to students who are eligible for free lunch.

***Probabilities are based on the proportions outlined in Figure 2-4. The ratios have been constructed by setting the value for students in non-Title I schools to 1. Thus, column 1 can be interpreted to mean that students served by Title I are "x" time more likely to be reading a year or more below grade level and eligible for free lunch than students in non-Title I schools.

TABLE 2.2

REGRESSION COEFFICIENTS FOR SELECTED STUDENT CHARACTERISTIC COMPARISONS FOR TITLE I vs. NON-TITLE I STUDENTS IN TITLE I SCHOOLS*

DISTRICT	SES			READING ACHIEVEMENT	OTHER DEMOGRAPHIC CHARACTERISTICS		PARTICIPATION IN OTHER COMPENSATORY PROGRAMS
	FREE LUNCH PARTICIPATION	AFDC STATUS	POVERTY THRESHOLD		RACE	SEX	
ADAMS COUNTY #12	.03	.13	-.02	.61*	.04	.12	----
ALUM ROCK	.03*	.31*	.23	-.01	.04	-.01	-.07*
BERKELEY COUNTY	.21	-.03	.03	.50*	.05*	.13*	.11*
BOSTON	.09*	.07	.03	.47*	.18*	.07*	.00
CHARLOTTE	.47*	.09*	.22*	.66*	.44*	.08*	.07*
HARRISON COUNTY	.29*	.11*	.17	.57*	.01	.15*	.04*
HOUSTON	.06*	.05	.15	.31*	.05*	.06*	.19*
MESA	.20*	.08*	.08	.34*	.12*	.02	.06*
NEWPORT	.22*	---	---	.34*	-.06	.18*	.18*
RACINE	.17*	.02	-.07	.49*	.19*	.12*	-.01
SANTA FE	.31*	.17*	.52*	.52*	.14*	.15*	.16*
WINSTON-SALEM	.45*	.10	-.14	.64*	.37*	.10*	---
YONKERS	.36*	-.01	.22	.34*	.26*	.12*	.00

*These coefficients are directly interpretable as differences in the proportions of students with the given characteristic. A positive coefficient means that the Title I group has a greater proportion of students who are either poor, low-achieving, minority, male, or participating in other compensatory programs, depending on the characteristic in question. An asterisk indicates that the comparison was significant at the .05 probability level.

as a single group. Cell entries for each of these tables represent the regression coefficient for the relevant comparison.*

Title I/Non-Title I Comparisons in Title I Schools

The most striking comparison between Title I and non-Title I students in Title I schools is in the area of achievement. (See Table 2.2.) With the exception of Alum Rock, all districts have significantly greater proportions of Title I students than non-Title I students in Title I schools with reading achievement scores one or more years below grade level. These within-school differences are sizable, ranging from a low of 31% in Houston to a high of 66% in Charlotte. As noted above, these findings reflect the fact that all of these districts based their student eligibility and targeting decisions on educational need in 1975-76. What is perhaps surprising is the relative consistency of the findings, given the variety of tests, cut-off levels, and procedures employed by districts in applying the common criterion of educational need.

Table 2.2 also reveals that Title I status within Title I schools is associated with the socioeconomic status of students. In 12 of the 13 sites, the proportion of Title I students who participated in the free lunch program significantly exceeds the corresponding proportion of non-Title I students. These differences range from lows of 3% and 6% in Alum Rock and Houston to highs of 45% and 47% in Winston-Salem and Charlotte, respectively. While these SES differences are sizable for most sites, they are generally smaller than differences in achievement.

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*Since each of the variables in these tables is a dichotomy, the regression coefficients may be interpreted directly as differences between proportions. Blank cells appear when sample sizes were too small to perform the relevant analysis, or when a given variable was irrelevant to a given site.

Table 2.2 also displays the results of comparisons for two additional SES indicators: AFDC status and poverty, as measured by the Orshansky index. In addition to free lunch, these indicators represent the most commonly used poverty criteria for determination of Title I school eligibility.* The results of the student comparisons for these SES variables are less pronounced and less consistent across sites than for the free lunch variable, although they generally support the free lunch comparisons. The AFDC comparison is significant in only five of the 13 districts, and the poverty comparison, in only two.

There are several possible explanations for these differences in results among the three poverty indicators. First, free lunch data were obtained on the largest sample of students, and AFDC data on the next largest, thereby increasing the likelihood of finding significant results for these variables. Second, relatively smaller proportions of families may be expected to receive AFDC than free lunch assistance. A lack of variance overall would tend to suppress the ability to detect differences between groups. It is also possible, however, that the differences in results across variables may not be simply a function of differing sample sizes and variances. Unlike AFDC status and poverty, free lunch participation is subject to the discretion of school administrators. It is possible that student level decisions with regard to Title I participation are made in tandem

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*The Orshansky index is generally applied to attendance areas through the use of census data. Here, the income of sampled students' families is used to construct the index, rather than census data. Eight Demonstration sites used census data to determine school eligibility in 1975-76; seven used AFDC counts; and five used free lunch counts. (For a summary of poverty criteria utilized by each site in 1975-76, see Appendix A, Table A-6.)

with decisions regarding free lunch. Finally, there are several LEAs for which the AFDC eligibility determination is set well below the poverty level. Therefore, this indicator would not necessarily predict similar results for the two. Further analysis will be performed in order to investigate these alternative hypotheses. Since the free lunch data are based on the broadest sample, however, they are highlighted in this report.

Two other demographic characteristics appear for some sites to be correlates of Title I status within Title I schools: race and sex. Title I students are more likely than non-Title I students to be minority and male in the majority of the 13 sites. These findings, as well as the findings with respect to poverty, may simply be by-products of the correlations between poverty, race, sex, and achievement in each site. That is, application of achievement criteria in the selection of students may in turn result in the selection of poor, minority, male students to the extent that these variables are positively correlated with achievement. On the other hand, these non-achievement criteria may enter into the student selection process, independent of their relationship with achievement. More complicated analysis would be needed to test these alternative explanations. Such analyses are necessary to separate changes due to allocation policy changes from those due to other factors.

Finally, Table 2.2 presents data on the relative participation of Title I and non-Title I students in other compensatory programs. In seven of the 13 districts, students who participate in Title I are also more apt to participate in other compensatory programs than non-Title I students in their schools. In Houston, Newport, and Santa Fe, in particular, the proportion of Title I students who participate in such programs is 16% to 19% greater than the corresponding proportion of non-Title I students. These sites appear to make a concerted effort to provide their Title I students with a variety of services from several funding sources. Only in Alum Rock are non-Title I

students more apt to participate in other compensatory programs than Title I students. In this site, which operates under consolidated funding, student participation in one of several compensatory programs is largely a bookkeeping convenience.

Title I/Non-Title I School Comparisons

Table 2.3 presents the cross-site summary for the school level Title I/non-Title I comparisons. Here, the most striking differences between students in Title I schools and non-Title I schools are not in achievement, but in poverty, the criterion by which Title I schools were selected in 1975-76. All of the 13 districts have a significantly greater proportion of students in Title I schools than in non-Title I schools participating in the free lunch program. For the majority of these sites, the difference is sizable, ranging from a low of 8% in Winston-Salem to a high of 57% in Yonkers.

As with the student level comparisons, the free lunch variable discriminated best between Title I and non-Title I schools for nearly all of the sites. This is true despite the fact that different sites used differing criteria in the determination of school eligibility for Title I. For example, Alum Rock, Racine, and Winston-Salem all used census data, but not free lunch participation, in the determination of school eligibility. Free lunch, however, is more closely associated with Title I school status in these sites than poverty status, the variable used in the census determination. So, too, in Yonkers, the most pronounced school level differences in poverty are found with respect to the free lunch variable, despite the fact that Yonkers used census and AFDC but not free lunch information to select Title I schools. Once again, these findings require further exploration.

There are also significant differences between Title I and non-Title I schools with respect to the proportion of low-achieving youngsters in 12 of the 13 districts. Generally, these differences are small in magnitude (less than or equal to

TABLE 2.3

REGRESSION COEFFICIENTS FOR SELECTED STUDENT CHARACTERISTIC COMPARISONS FOR STUDENTS IN TITLE I vs. NON-TITLE I SCHOOLS*

DISTRICT	SES			READING ACHIEVEMENT	OTHER DEMOGRAPHIC CHARACTERISTICS		PARTICIPATION IN OTHER COMPENSATORY PROGRAMS
	FREE LUNCH PARTICIPATION	AFDC STATUS	POVERTY THRESHOLD		RACE	SEX	
ADAMS COUNTY	.10*	.03	.14	.11*	.01*	-.03	---
ALUM ROCK	.19*	.20*	.09	.04*	.11*	.03	.02*
BERKELEY COUNTY	.14*	.06	-.12	.07*	.06*	-.03	.07*
BOSTON	.25*	.05	.20*	.10*	.08*	.02	-.08*
CHARLOTTE	.11*	.04	.13*	.07*	.04*	.00	.01
HARRISON COUNTY	.25*	.05	.23	.08*	.03*	.01	-.04*
HOUSTON	.41*	.05*	.23*	.19*	.34*	.02	.24*
MESA	.14*	.05*	-.01	.06*	.09*	-.02	.05*
NEWPORT	.22*	---	---	.10*	.10*	-.02	.05
RACINE	.13*	.01	.04	.00	.07*	.00	-.05*
SANTA FE	.33*	.02	.44*	.10*	.20*	-.03	.17*
WINSTON-SALEM	.08*	.02	.04	.03*	.01	.01	---
YONKERS	.57*	.16*	.31*	.40*	.71*	.16*	-.25*

*These coefficients are directly interpretable as differences in the proportions of students with the given characteristic. A positive coefficient means that the Title I group has a greater proportion of students who are either poor, low-achieving, minority, male, or participating in other compensatory programs, depending on the characteristic in question. An asterisk indicates that the comparison was significant at the .05 probability level.

11% in each site). The two exceptions are Houston and Yonkers, where the difference in proportions of low-achieving students is sizable (19% and 40%, respectively).

Turning to other demographic characteristics, there are significant differences between school types in the proportions of minority students for all but two of the districts. Differences are once again most pronounced in Houston and Yonkers (34% and 71%, respectively). There are no significant differences between school types in proportion male in 12 of the 13 sites. In Yonkers, the one exception, Title I schools tend to have more males than non-Title I schools.

The last school level comparison presented in Table 2.3 refers to participation in other compensatory programs. Here, the pattern is mixed. In five sites, Title I schools have a significantly greater proportion of students participating in such programs. In these sites, it appears that compensatory programs are concentrated in Title I schools. In four sites, non-Title I schools have a significantly greater proportion of students participating in other compensatory programs, suggesting a diffusion of such programs throughout the district. These school level differences are sizable in only three sites, however. In Houston and Santa Fe, other compensatory programs are concentrated in Title I schools; in Yonkers, the opposite is true.

Taken together, these tables point to the conclusion stated in the overview above. There is evidence that the characteristics of Title I schools and students reflect the school and student eligibility and targeting decisions of 1975-76. There are also suggestions that other factors besides poverty and achievement may have entered into the decision-making process. These include race, sex, and the availability of other compensatory programs to schools and students.

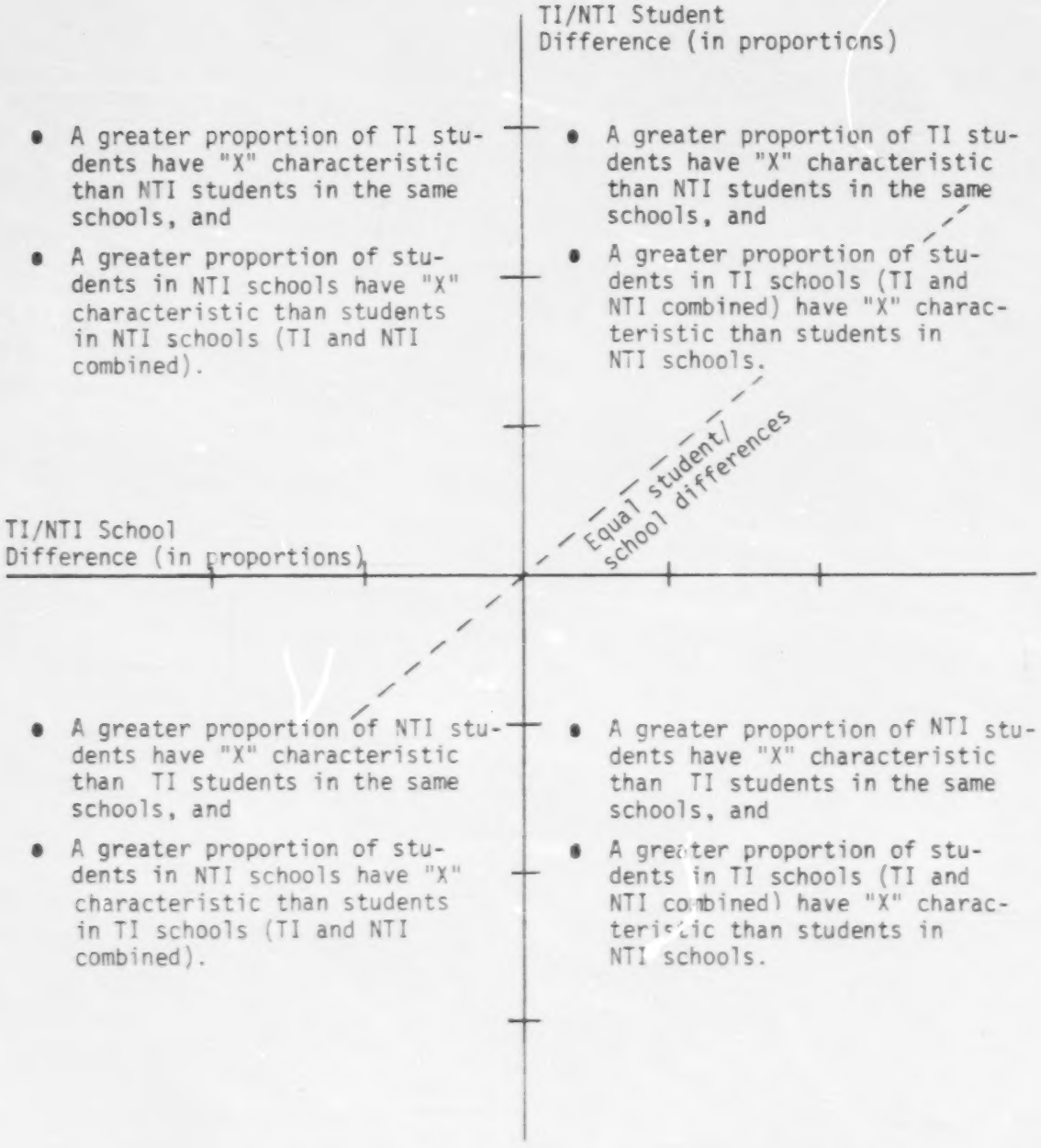
2.3.3 Cross-Site Summary of School Type by Student Type Comparisons

Section 2.3.2 above primarily addressed the correspondence between stated allocation policy decisions and the characteristics of schools and students served during the 1975-76 school year. In this section, student and school level comparisons are examined jointly for each site. The basic objective is to identify common cross-site patterns, if any, which may be suggestive of the allocation policy choices made for 1976-77, as well as the results of such choices on schools and students served. This objective is achieved through the use of two-dimensional plots, as described below.

Figure 2-E displays a sample plot which summarizes the results of the student type comparisons (vertical axis), and the school type comparisons (horizontal axis) for selected student characteristics. These plots can be interpreted in a number of ways. For example, sites falling into the upper right quadrant have more Title I students and Title I schools with the characteristic in question, i.e., both differences of proportions are positive. All sites in the upper left quadrant have more Title I students with the characteristic, but fewer Title I schools than non-Title I schools with the characteristic. The remaining quadrants can be interpreted similarly. The relationship between the student and school type differences can also be seen from the plots. All departures from the 45° axis mean that either school or student differences are larger than the other. This type of display helps to clarify cross-site comparisons for each student characteristic, especially since the metric nature of the plot translates proportional differences between groups into physical distances between groups.

Figure 2-E

Example of Two-Dimensional Plot of "X" Student Characteristic


TI/NTI Student Difference (in proportions)
TI/NTI School Difference (in proportions)
Equal student/ school differences
• A greater proportion of TI students have "X" characteristic than NTI students in the same schools, and
• A greater proportion of students in NTI schools have "X" characteristic than students in NTI schools (TI and NTI combined).
• A greater proportion of TI students have "X" characteristic than NTI students in the same schools, and
• A greater proportion of students in TI schools (TI and NTI combined) have "X" characteristic than students in NTI schools.
• A greater proportion of NTI students have "X" characteristic than TI students in the same schools, and
• A greater proportion of students in NTI schools have "X" characteristic than students in TI schools (TI and NTI combined).
• A greater proportion of NTI students have "X" characteristic than TI students in the same schools, and
• A greater proportion of students in TI schools (TI and NTI combined) have "X" characteristic than students in NTI schools.

Cross-Site Summary: Reading Achievement

Figure 2-5 summarizes the school and student type comparisons for each site with respect to reading achievement. All sites, with the exception of Alum Rock, have greater proportions of Title I students who are low achievers than non-Title I students in Title I schools. Two sites--Houston and Yonkers--also have sizable differences in the proportion of low achievers in Title I versus non-Title I schools. In Houston, the within-school difference exceeds the between-school difference; in Yonkers, the opposite is true.

No pattern clearly emerges from this figure. Districts with dissimilar allocation policies appear to be similar in their distribution of low-achieving students within and across schools. There are at least two possible hypotheses for this finding. Of course, it is possible that achievement scores are fairly evenly distributed across schools in these sites. These data are not based, however, on actual achievement test scores, but rather on teachers' assessments of students' performance based on standardized tests or on progress in standard texts. Emphasis on individualization and grouping children for instruction may indirectly lead teachers to magnify differences among their students and to report a roughly normal distribution of scores within their classrooms. Such a tendency would lead to the same finding--lack of difference between school types. These alternate hypotheses will be tested in future analyses.

Cross-Site Summary: Free Lunch

Figure 2-6 displays the results of the student/school type comparisons for each site with respect to the free lunch variable.* Here a pattern emerges which closely resembles the allocation policy choices made by the districts. The pattern consists of four clusters.

The first cluster is composed of all districts which chose to allocate funds directly to students, with the exception of Alum Rock. Also included in this group is Berkeley County, which would have chosen the direct allocation option, had funds

*Similar figures for other indicators of disadvantage appear in Appendix A, Figures 5 through 8.

FIGURE 2-5

Cross District Summary of Percentage Differences Between TI/NTI Students and Between TI/NTI Schools for Proportion Poor Readers

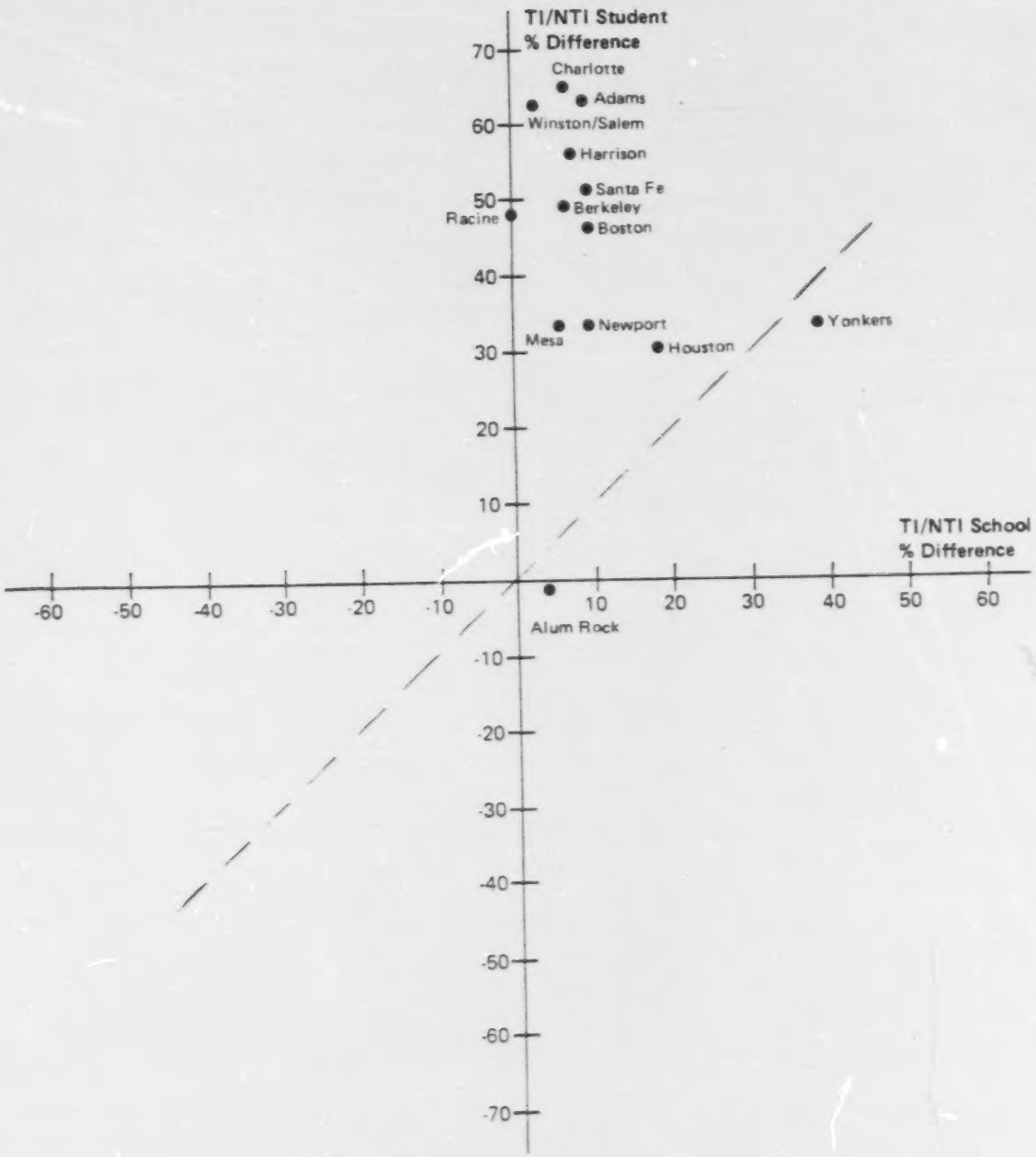
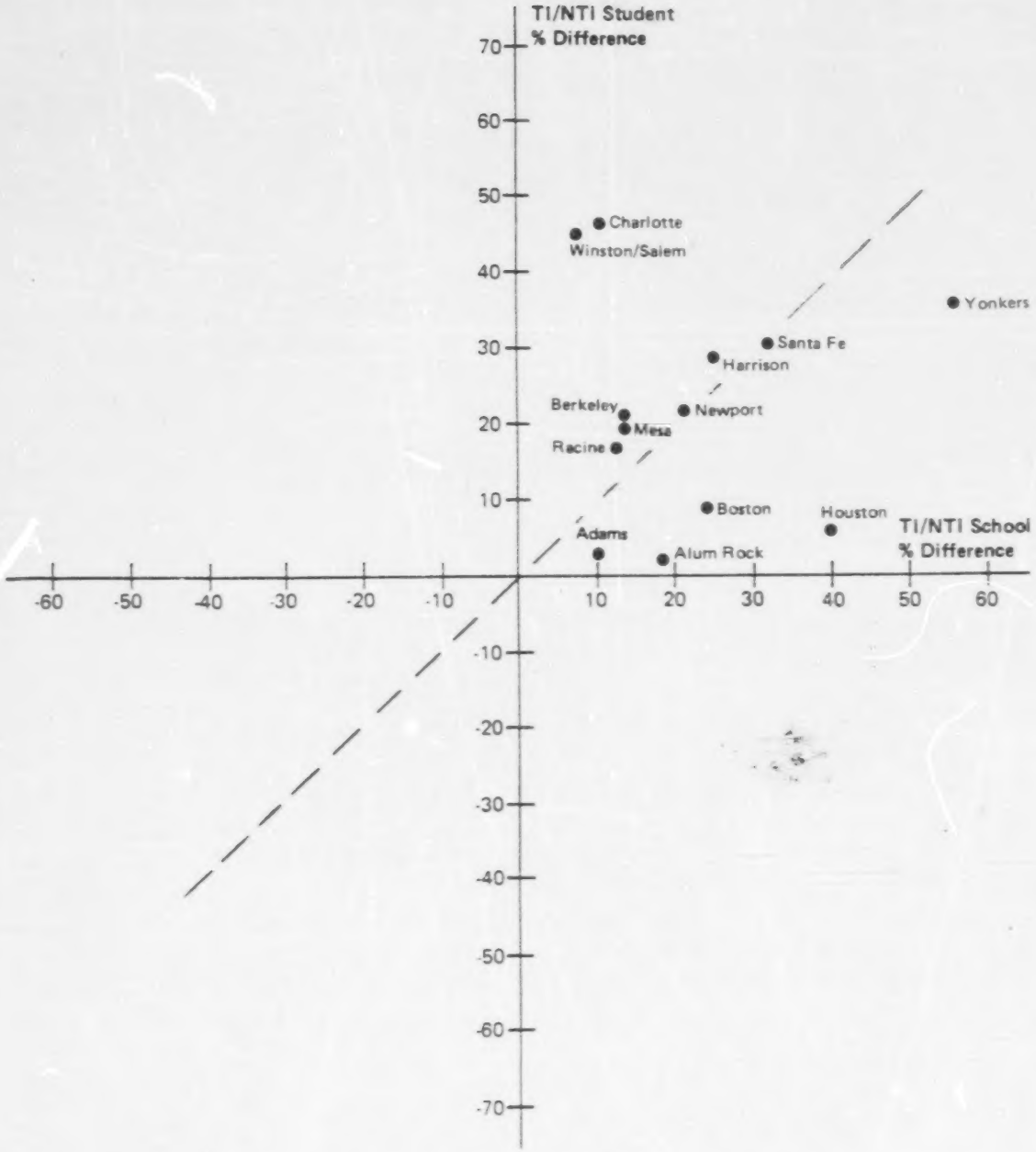


Figure 2-6

Cross District Summary of Percentage Differences
Between TI/NTI Students and Between TI/NTI Schools for Proportion Free Lunch



permitted. These sites all lie on or near the 45° axis--that is, they all have roughly equal student/school type differences in free lunch participation. Of course, there is variation within this cluster. Adams County #12 shows virtually no difference on either the student or school comparison; Santa Fe shows large differences on both.

The second cluster is comprised of Winston-Salem and Charlotte, the two districts which chose to reallocate resources solely on the basis of achievement. These districts have large student level differences with respect to free lunch participation and small school level differences.

Boston, Houston and Alum Rock form a third cluster. Each of these sites has chosen a unique approach to reallocation, although Boston and Houston are both applying achievement as well as poverty criteria in the determination of school eligibility. These sites have small student level differences, but large school level differences on this variable.

Finally, Yonkers is an outlier. This site, which will continue to use only poverty in the determination of school eligibility, has extreme differences between both student and school types on free lunch participation.

Despite the fact that these clusters parallel the allocation options closely, it is difficult to interpret their meaning. One could argue that the more heterogeneous schools are with respect to poverty, the more difficult it is to ignore that factor in school selection. One could also argue that when poverty differences among schools are either small, or no greater than within-school differences, achievement may be seen as a viable eligibility criterion even if one seeks to serve students from poor families.

Such interpretations belie the complexity of the decision process, however. To be sure, allocation decisions must rest in part on the distribution of poor and low-achieving students within and across schools. They are also a function of

district size, the current saturation of Title I services within and across schools, and per-pupil Title I expenditures, among other things. In the future, we hope to use a variety of such factors to build a model of allocation policy choices and their consequences.

2.4 Summary

The data do suggest certain likely results of these allocation policy choices, whatever their origins. Summarized in the overview, they are repeated again here:

- In all sites except Yonkers, the differences in average achievement level between types of students within schools are greater than the differences across schools. Thus, any increase in the number of schools served by Title I should result in Title I services being delivered to students with a lower average achievement level if the number of students served per school decreases and districts first serve students most in need.
- In almost all direct allocation sites, the within-school and across-school differences in students receiving free lunch are relatively large and approximately equal. There are relatively small differences across schools in achievement levels for these sites. Thus, serving more schools might result in the selection of fewer students from poor families but the average achievement level of newly served students is likely to be the same or lower than previously served students.
- In the sites substituting achievement eligibility of schools for poverty eligibility (Charlotte and Winston-Salem), the across-school differences in poverty indicators are uniformly small, as are the across-school differences in percent minority. Since these sites anticipate a small change in number of schools served, as well as a slight decrease in numbers of students served per school, the likely result of Demonstration changes is to maintain similar proportions of poor and minority students among those receiving Title I services.

- In Houston and Yonkers, the differences between schools in both proportion poor and proportion minority are high. Schools not now receiving Title I are richer and have smaller proportions of minority students. Thus, even small changes in the proportion of schools served could result in smaller proportions of poor and minority students among those served by Title I.

3.0 STUDENT EXPERIENCES

3.1 Research Objectives and Major Conclusions

This section focuses on the amount and kinds of classroom services received by Title I and non-Title I children in the Demonstration districts.* The major research questions addressed are the following:

- To what extent and in what way(s) do the classroom services received by Title I students and schools differ from services received by non-Title I students and schools?
- Does the amount of non-compensatory instruction received by Title I students appear to be related to the amount of compensatory instruction received?
- Does the delivery of compensatory services to Title I students differ in terms of group size and type of instructor from the delivery of non-compensatory services to these same students?
- Do the delivery of compensatory and non-compensatory services to Title I students differ in terms of the degree to which instruction is tailored to individual student needs?

Summarizing the conclusions presented in this chapter, four major points are made about the instructional experiences of Title I and non-Title I students:

- In most Demonstration districts, Title I students received about the same amount or slightly more language arts instruction (combining compensatory and regular classroom instruction) as non-Title I students.
- In most Demonstration districts, Title I students received more compensatory but less regular language arts instruction than non-Title I students.

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*Title I status is defined here on the basis of teacher classification only. A student may receive compensatory instruction and/or support services through Title I and be classified as a Title I student. This definition differs from the one used in a report entitled "Compensatory Education Services" by NIE (July, 1977).

- In all Demonstration districts, the compensatory language arts instruction received by Title I students was quite different from the regular classroom language arts instruction received by both Title I and non-Title I students.

  --Almost all compensatory instruction was offered in small and medium groups; only half of the regular language arts instruction was delivered in this way.

  --Instructional specialists delivered most of the compensatory language arts instruction but almost no regular classroom instruction.

  --Compensatory language arts instruction was more likely to be tailored to individual students' needs than regular language arts instruction.

- Most compensatory services were delivered in language arts rather than mathematics. Across all districts, language arts instruction comprised about 70% of all compensatory services provided to Title I students while mathematics instruction comprised about 15%.

Several other conclusions are drawn in this chapter, including the following:

- The length of the school day varies by up to 90 minutes among districts, but varies only slightly between Title I and non-Title I students within each district.
- There is little variability among districts in the proportion of the instructional time devoted to language arts and mathematics on a typical school day. Most districts spend one-third of the day on language arts and about 15% on mathematics.
- Almost all districts provide an average of 15 to 30 minutes of compensatory language arts instruction to Title I students on a daily basis. On the other hand, few districts provide compensatory instruction in mathematics.

3.2 Method

3.2.1 Instruments and Variable Groups

Results presented in this chapter are based on data obtained from two instruments: the Classroom Activities Log (CAL)

and the Program Description Modules. A copy of the CAL is included in Appendix B. The major portion of the CAL is a description, supplied by classroom teachers, of the experiences of sampled students on selected school days. For purposes of data collection, the school day is divided into ten-minute intervals. For each interval, teachers were asked to describe:

- The content or nature of the activity occurring during that period of time (13 categories);
- Whether or not that activity was compensatory (2 categories);
- Whether or not the activity occurred in a language other than English (2 categories);
- The size of the group in which the sampled student participated in the activity (5 categories); and,
- The type of instructor (if any) directly involved in the activity (9 categories).

In addition to this primary section, there are two other sections to the CAL. One of these requires the teacher to describe in greater detail the nature of any compensatory services received and the kind of instruction that the child missed while receiving these services. The other section asks the teacher to describe activities that were departures from the activities of the normal school day. Data from all three sections were obtained for each student on two randomly-selected days. Based on the results of the CAL reliability study,* time measures available from the two observation days were averaged for analytic purposes.

As noted above, the primary information provided by the CAL consists of observations along five dimensions. Considering each category along each dimension as a separate treatment yields 2,340 (13x2x2x5x9) possible "instructional experiences" which a child could have during every ten-minute interval of the day. Since many of these are neither important nor even sensible

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*Because of the importance of the CAL, a study of its reliability was undertaken in which classroom teachers and trained observers completed CALs for a small sample of students. The findings of this reliability study are presented in Appendix C.

(e.g., compensatory lunch), a subset of these variables was selected for analysis. Appendix B, Table B-1, lists and defines this complete set of variables.

Briefly, the CAL instructional experiences examined in this report are:

- Time (minutes per day) spent in language arts, mathematics, other academic instruction, non-academic instruction, and other activities;
- Instructional group size, defined as the number of students taught for the particular activity being described; and,
- Type of instructor, defined as the person responsible for the activity being described.

Data from a series of Program Description Modules were used to supplement the CAL analyses. These self-administered questionnaires provided further information about how daily instructional activities were planned and carried out for the groups in which sample students participated. The information was provided by teachers of regular and compensatory instruction for Title I and non-Title I students. The reports focused solely on language arts and mathematics instruction.

For the most part, the Program Description Modules were designed to address the degree to which instruction was specifically tailored to individual students' needs. The questions reflect the dimensions of individualization utilized in the National Survey of Compensatory Education Services. These include the use of diagnostic procedures, the use of individually prescribed objectives, activities, and materials, and the use of evaluation and feedback activities.

From the many questions related to these aspects of individualization, the following variables were selected for analysis in this section of this report:

- Individually Prescribed Activities and Materials Scale*;

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*See Appendix B, Table B-28, for a complete set of the items and weights comprising this scale.

- Differentiation of materials for individual students;
- Measures used in assessment and planning;
- Utilization of performance objectives; and,
- Frequency of recording students' progress.

3.2.2 Sample and Analytic Techniques

The basic sampling design of the study was summarized in Chapter 1. As noted in this earlier discussion, elementary schools in each district were grouped according to the presence and absence of Title I programs prior to and during the Demonstration. A detailed description of the analytic method used is presented in Appendix D. In general terms, each district was analyzed separately using the appropriate student-by-school design. Regression methods were used to perform the analyses, which were site-specific to the extent that the student-by-school type designs differ across districts. The specific groups and numbers of students in each group available for CAL analyses in each site are given in Table 3.1.* Similar data for the Program Description Modules are given in Table 3.2.

3.3 Findings

Major conclusions regarding the experiences of Title I and non-Title I students have been presented earlier in this chapter. In this section we present additional discussions of the findings which lead to these conclusions. Before turning to these discussions, we should briefly mention the policy we have adopted regarding statistical significance and the presentation of results. As can be seen from the results presented in Appendix B, tests of significance were conducted in the course of all student and school regression analyses. However, in some cases rather small differences were found to be statistically significant, and, because of the small sample sizes, other large and more practically meaningful differences were not. Since one of the primary objec-

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*Based on investigations of selected variables, it appears that the results reported in this chapter may vary by grade. We have not included grade as a factor in this study due to the small samples of children at each grade level.

TABLE 3.1

SAMPLE SIZES BY SITE AND TREATMENT
FOR THE CLASSROOM ACTIVITIES LOG

DISTRICT	STUDENT TYPE	COMMON SCHOOL TYPES				DISTRICT SPECIFIC SCHOOL TYPES		TOTAL
		1	2	3	4	9	0	
ADAMS COUNTY #12	TI	9						9
	NTI	24	80					104
	TOTAL	33	80					113
ALUM ROCK	TI	17				13		30
	NTI	12	50			16	14	92
	TOTAL	29	50			29	14	122
BERKELEY COUNTY	TI	25						25
	NTI	45			29			74
	TOTAL	70			29			99
BOSTON	TI	61						61
	NTI	69	30		104	30		233
	TOTAL	130	30		104	30		294
CHARLOTTE	TI	86		39				125
	NTI	88	185	39	62			374
	TOTAL	174	185	78	62			499
HARRISON COUNTY	TI	46						46
	NTI	45	41					86
	TOTAL	91	41					132
HOUSTON	TI	84					11	95
	NTI	87	81		458	113	15	754
	TOTAL	171	81		458	113	26	851
NESA	TI	44						44
	NTI	54	70					124
	TOTAL	98	70					168
NEWPORT	TI	5						5
	NTI	4	37					41
	TOTAL	9	37					46
RACINE	TI	32						32
	NTI	44	116					160
	TOTAL	76	116					192
SANTA FE	TI	44						44
	NTI	46	48					94
	TOTAL	90	48					138
WINSTON-SALEM	TI	47		13				60
	NTI	48	137	10	77			272
	TOTAL	95	137	23	77			332
YONKERS	TI	9				5		14
	NTI	6	6		73	5	22	112
	TOTAL	15	6		73	10	22	126

KEY TO SCHOOL TYPES

School types are assigned contingent upon the status of the school during the first two years of the implementation. With the exception of Utah (#12), the common school types are:

SCHOOL TYPE	SCHOOL STATUS	
	[illegible]	[illegible]
1	TI	TI
2	NTI	TI
3	TI	NTI
4	NTI	NTI

For the four sites with additional or non-comparable types (Alum Rock) the assignments are:

DISTRICT	SCHOOL TYPE	SCHOOL STATUS 1973-74	SCHOOL STATUS 1974-75	
Alum Rock	1	TI	TI	- saturated
	2	NTI	TI	- saturated
	3	TI	TI	- concentrated
	4	NTI	TI	- concentrated
	5	NTI	TI	- [illegible] school
	6	NTI	NTI	- skipped in [illegible]
	7	TI	TI	- [illegible]
	8	TI	TI	- [illegible] school
	9	NTI	TI	- [illegible] school

TABLE 3.2

SAMPLE SIZES BY SITE FOR THE
PROGRAM DESCRIPTION MODULES*

DISTRICT	REGULAR LANGUAGE ARTS NON-TITLE I STUDENTS	REGULAR LANGUAGE ARTS TITLE I STUDENTS	COMPENSATORY LANGUAGE ARTS TITLE I STUDENTS
Adams County #12	69	5	7
Alum Rock	55	15	3
Berkeley County	40	15	11
Boston	138	39	43
Charlotte	228	92	64
Harrison County	59	36	25
Houston	353	52	44
Mesa	93	32	18
Racine	97	16	28
Santa Fe	63	37	10
Winston-Salem	172	49	26
Yonkers	78	19	20

*Small sample sizes in Newport precluded their inclusion in these module analyses.

Small sample sizes for mathematics also restricted our analysis to language arts only.

In addition, analyses were performed by student type only, and not according to the school-by-student design used for the CAL.

tives of this chapter (and the analyses of baseline year data in general) is to examine trends in experiences of various types of students, we have not restricted ourselves here solely to discussions of statistically significant findings. Rather, using all results available to us, we search for patterns of differences which are consistent within and across districts.*

3.3.1 Instructional Time, Group Size, and Instructor Type at the District Level

Perhaps the most basic measure of a student's instructional experiences is the total amount of time s/he spends in school each day. Table 3.3 presents such information for each of the Demonstration districts. Length of school day was calculated for each child by summing the different types of instruction received, as indicated on the Content Area section of the CAL. This figure thus represents the length of the average school day across all students (Title I and non-Title I) in each district on whom CAL data were available. The average length of the school day across all districts is 372 minutes with a range from 322 minutes in Alum Rock to 402 minutes in Berkeley County.

The length of the "instructional day" is also presented for each district in Table 3.3. This measure was computed by subtracting the amount of time spent by each student in lunch, recess, or "other" from the length of the school day, and, therefore, gives an indication of the total amount of time "available for organized instruction" in each district. The instructional day averages 270 minutes across districts with a range from 235 minutes in Alum Rock and Boston to 322 minutes in Houston. It

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*As stated earlier, a number of instructional experience measures were constructed from the raw CAL data. Means and standard deviations for each measure by student and school type within school district are presented in Appendix B, Tables B-2 through B-14. The results of analyses comparing the amount of instruction received by various groups of students and schools are given in Appendix B, Tables B-15 through B-27. In addition, a prose summary of the student/school comparative analyses for each district is presented in this same appendix.

TABLE 3.3

LENGTH OF SCHOOL DAY AND
LENGTH OF INSTRUCTIONAL DAY
FOR THE DEMONSTRATION DISTRICTS

DISTRICT	DAY LENGTH IN MINUTES	
	SCHOOL DAY (RANK)	INSTRUCTIONAL DAY (RANK)
Adams County #12	383 (7)	266 (7)
Alum Rock	322 (13)	235 (12.5)
Berkeley County	402 (1)	284 (3)
Boston	339 (12)	235 (12.5)
Charlotte	356 (11)	264 (8)
Harrison County	396 (2)	278 (5)
Houston	390 (3)	322 (1)
Mesa	366 (8.5)	263 (9)
Newport	366 (8.5)	277 (6)
Racine	389 (4)	289 (2)
Santa Fe	387 (5)	261 (10)
Winston-Salem	362 (10)	279 (4)
Yonkers	384 (6)	254 (11)
AVERAGE OF DISTRICT MEANS	372	270

is interesting to note that the length of the instructional day is not perfectly correlated with the length of the school day. For example, Houston had an average of over 30 minutes more instructional time per day available to its students than any other district, and almost 90 minutes more than some districts; however, Houston had a school day comparable in length to that of many other districts. On the other hand, Alum Rock and Boston had the shortest school days and also provided the smallest amount of instruction.

The proportion of the school day spent on various instructional activities for students in each school district is presented in Figure 3-1. On the average, students in each district spent about one-third of their school day on language arts (regular and compensatory), 15% on mathematics (regular and compensatory), 10% on other academic instruction (science and social studies), another 15% on non-academic instruction, and the rest on lunch, recess, and classroom management. This varies somewhat, but not dramatically, by school district, with Houston, Newport, and Winston-Salem emphasizing the basic skills (language arts and mathematics) somewhat more than other districts.

Figure 3-2 presents for each district the amount of time students spent receiving instruction in each of four different group sizes as a proportion of the length of the instructional day. The proportion of time spent in different group sizes is much more variable across sites than the proportion of time spent in different instructional content areas. Students spent between 4% and 19% of the instructional day in individualized instruction; between 3% and 14% of the day in medium group instruction; and between 34% and 77% of the day in large group instruction. Boston devoted a smaller proportion (about 34%), while Racine devoted a larger proportion than all others (about 77%).

The instructional day for each district is broken down by four categories of instructor in Figure 3-3. As was

Figure 3-1

Breakdown of School Day by Instructional Content Area and Demonstration District

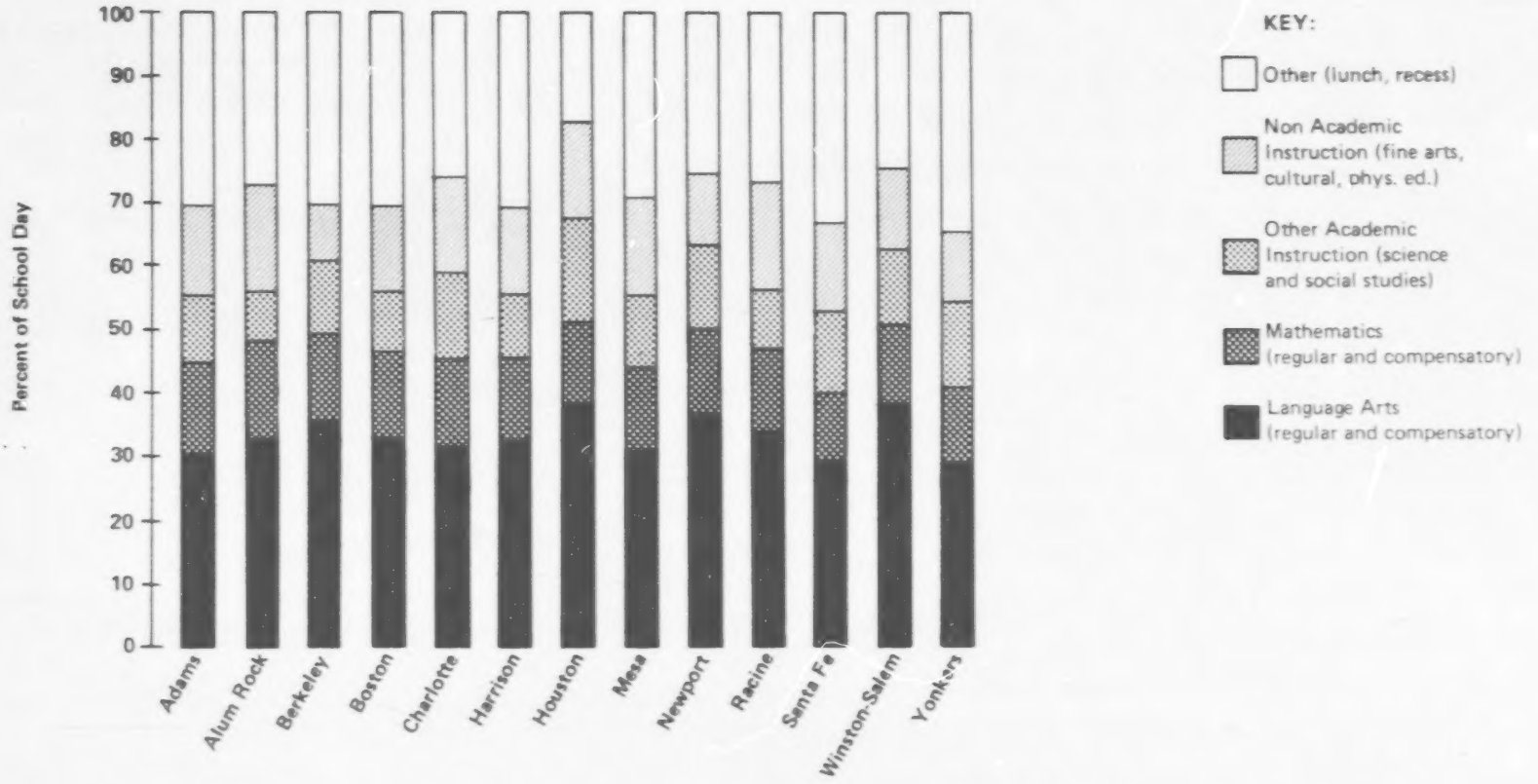


Figure 3-2

Breakdown of Instructional Day by Group Size
and Demonstration District

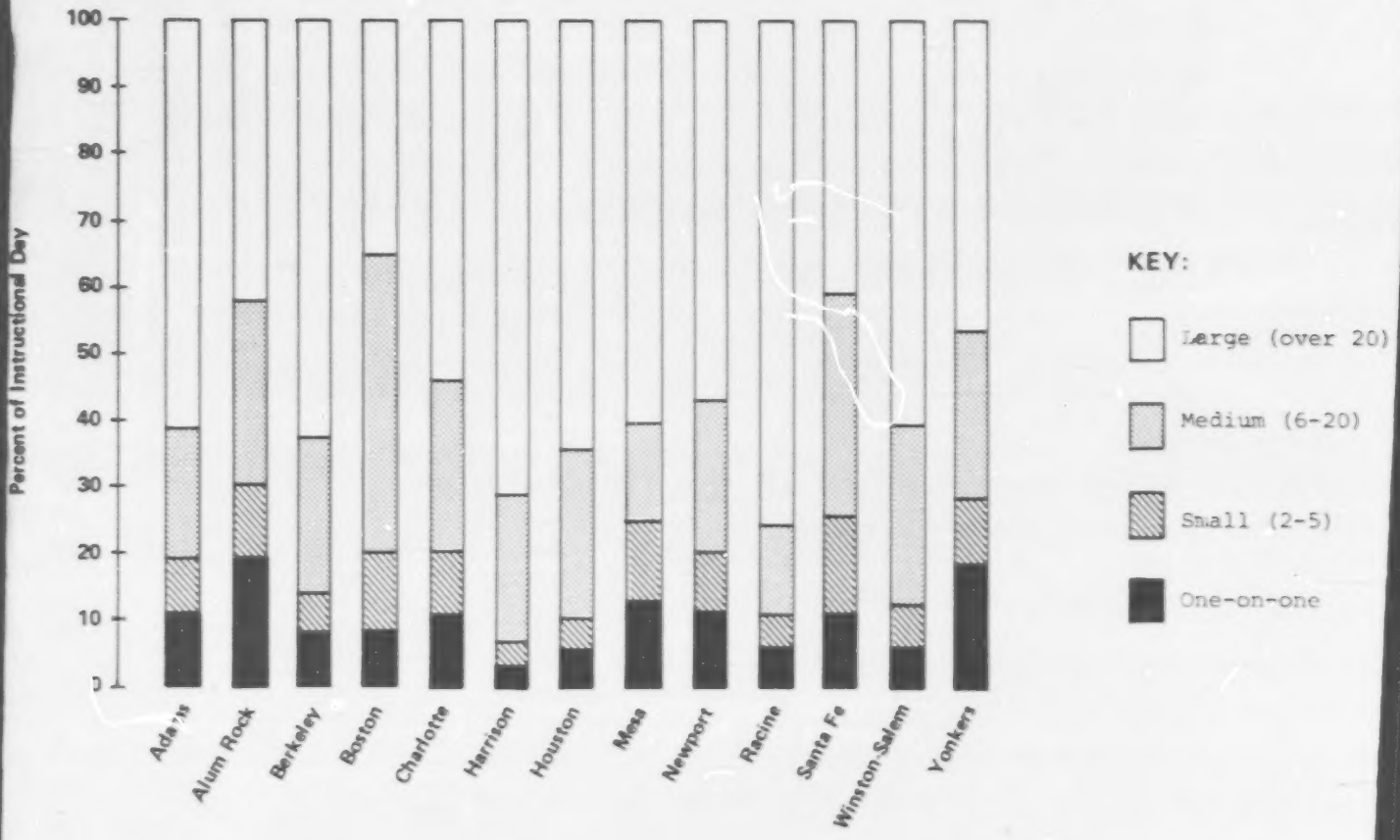
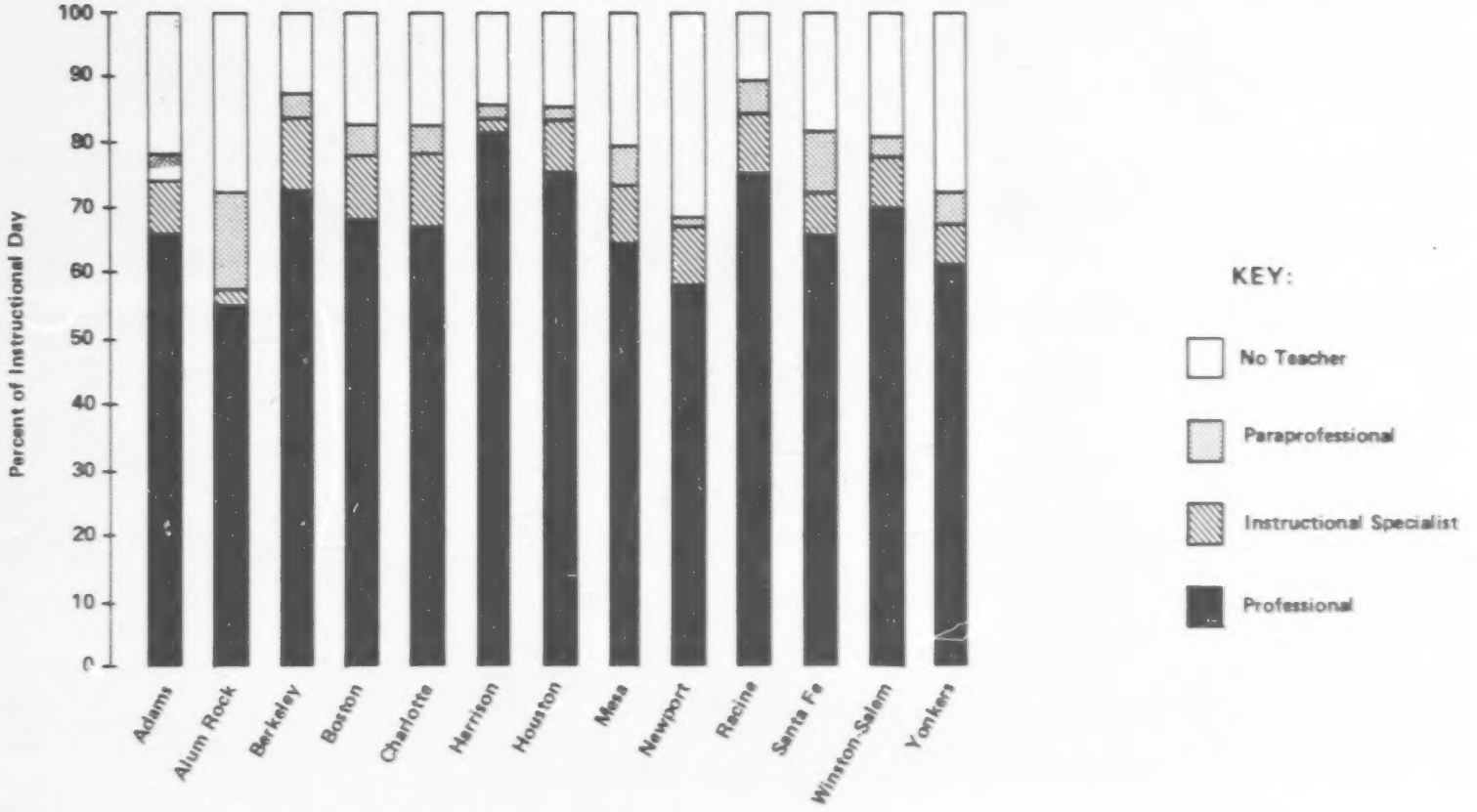


Figure 3-3

Breakdown of Instructional Day by Teacher Type and Demonstration District



the case with group size, there is a fair amount of variability across districts in the proportion of the instructional day that sampled students received instruction from different types of instructors. Professionals (homeroom teachers or other classroom teachers) provided direct instruction from 55% to 83% of the instructional day, paraprofessionals (student teachers, aides, parent volunteers, etc.) from 2% to 12%, and instructional specialists from 1% to 16%. From 9% to 31% was spent without direct adult supervision. Districts such as Alum Rock and Newport used less professional time and correspondingly more paraprofessional and unsupervised time than a district such as Berkeley County in which professional teaching time comprised an average of 83% of the instructional day.

To this point, we have examined some basic characteristics of the type and level of services delivered to students in the Demonstration districts. We have seen that the length of the school day (and instructional day) is variable across districts, with about a 90-minute difference between the districts with the longest and shortest days. However, there is little variability among districts in terms of the proportion of language arts and mathematics instruction delivered in a school day. Districts spent about one-third of the day on language arts and about 14% on mathematics. On the other hand, there is a great deal of variability in the way in which instruction was delivered.

3.3.2 Instructional Time by Student Type

While the data presented above give an overall picture of instruction delivered throughout each district, they say nothing about differences in the instruction received by Title I and non-Title I students. Table 3.4 is analogous to Table 3.3 in that it presents the length of the school and instructional days by district. However, it presents these data separately for Title I students, for non-Title I students in Title I schools, and for non-Title I students in non-Title I schools. It can be seen from this table that there are few appreciable differences in the length of either the school day or the instructional day across the three groups of students in each district. Only in Adams and Yonkers are differences among groups of students as large as 20 minutes. Between-group differences in other districts are generally less than 10 minutes.

As is shown in Table 3.5, Title I students across all districts received an average of 34 minutes of compensatory services per day--about 24 minutes in language arts, five minutes in mathematics, and the rest in other compensatory instruction. This contrasts with an average of four minutes of compensatory services per day for non-Title I students. The receipt of such compensatory services by non-Title I students is possible since these students may qualify for and receive services from compensatory education programs other than Title I (e.g., Follow Through, State-supported programs, etc.).

Figures 3-4 to 3-7 show by district the average amount of regular and compensatory language arts and mathematics instruction and proportion of the day devoted to that instruction for three groups: Title I students, non-Title I students in Title I schools, and non-Title I students in non-Title I schools. Amount of instruction (in minutes) is denoted by the vertical scale, while the proportion of the

TABLE 3.4

LENGTH OF SCHOOL DAY AND LENGTH OF INSTRUCTIONAL DAY
FOR GROUPS OF STUDENTS IN THE DEMONSTRATION DISTRICTS

DISTRICT	LENGTH OF SCHOOL DAY (MINUTES)			LENGTH OF INSTRUCTIONAL DAY (MINUTES)		
	TI STUDENTS	NTI STUDENTS IN TI SCHOOLS	OTHER NTI STUDENTS	TI STUDENTS	NTI STUDENTS IN TI SCHOOLS	OTHER NTI STUDENTS
Adams County #12	359	365	392	257	246	273
Alum Rock	325	332	319	239	236	234
Berkeley County	393	404	409	281	284	286
Boston	338	341	338	236	232	236
Charlotte	353	352	358	267	263	263
Harrison County	391	398	400	273	279	283
Houston	385	388	391	318	318	324
Mesa	367	368	365	265	260	264
Newport	364	359	367	280	265	278
Racine	385	392	388	286	290	290
Santa Fe	390	391	380	259	262	262
Winston-Salem	361	362	363	279	281	279
Yonkers	374	392	384	249	225	256
AVERAGE OF DISTRICT MEANS	368	373	373	268	265	271

TABLE 3.5

AVERAGE NUMBER OF MINUTES OF COMPENSATORY INSTRUCTION DELIVERED PER DAY ACROSS THE 13 DEMONSTRATION DISTRICTS

Content Area	Title I	Non-Title I
Language Arts	24	3
Mathematics	5	1
Other	5	0
TOTAL	34	4

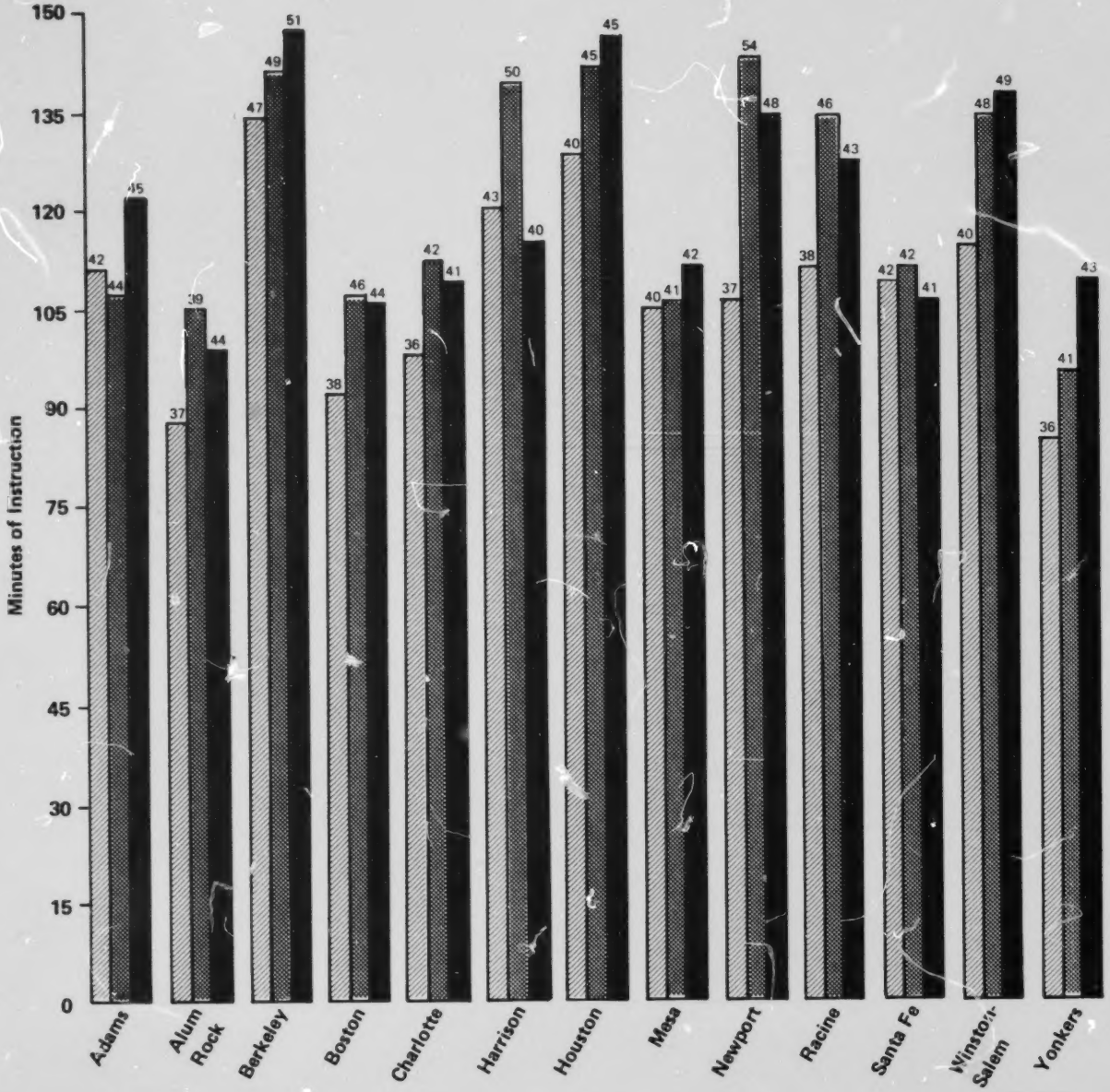
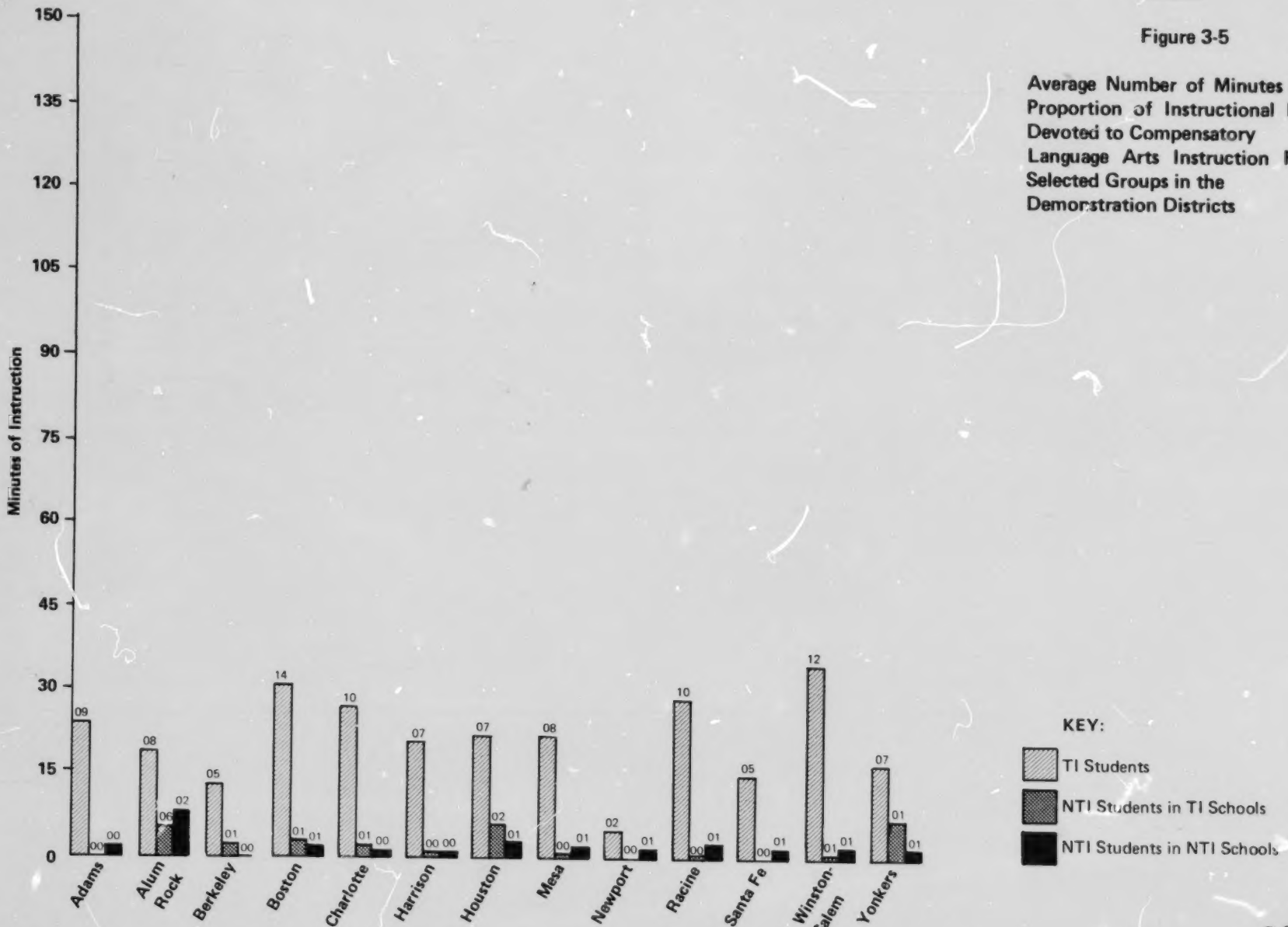


Figure 3-4

Average Number of Minutes and Proportion of Instructional Day Devoted to Regular Language Arts Instruction For Selected Groups in the Demonstration Districts

Figure 3-5

Average Number of Minutes and Proportion of Instructional Day Devoted to Compensatory Language Arts Instruction For Selected Groups in the Demonstration Districts



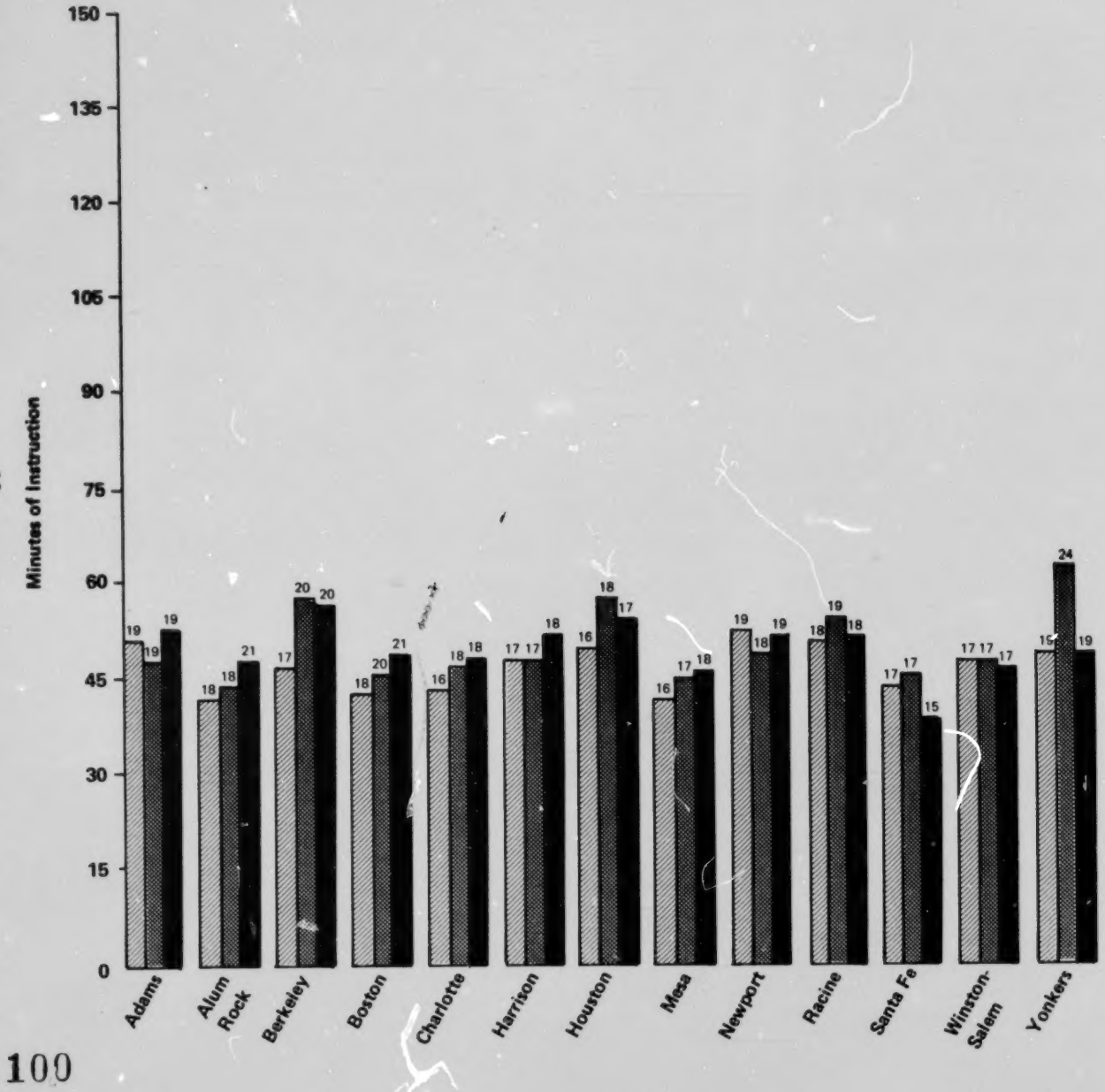


Figure 3-6

Average Number of Minutes and Proportion of Instructional Day Devoted to Regular Mathematics Instruction For Selected Groups in the Demonstration Districts

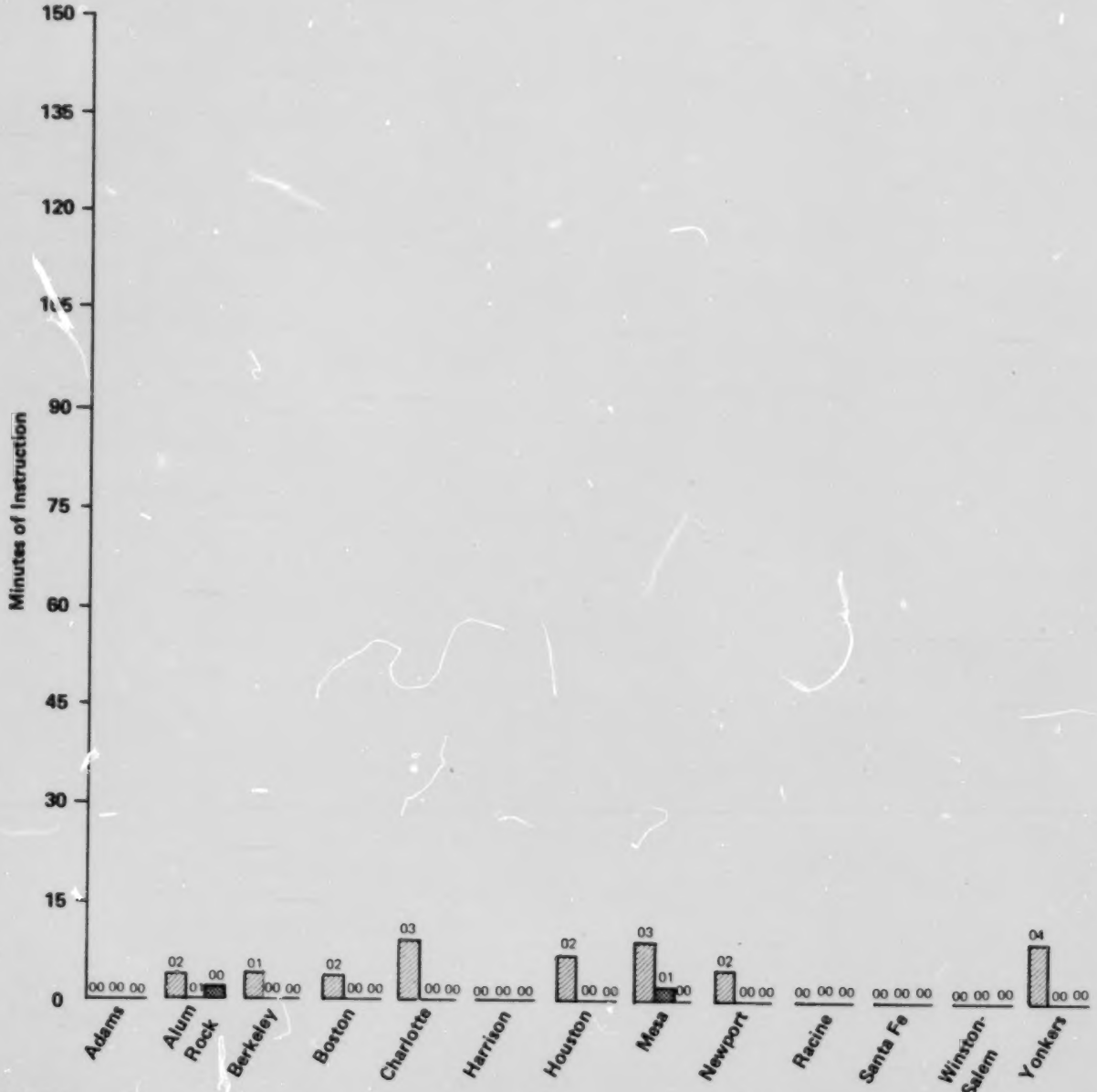


Figure 3-7

Average Number of Minutes and Proportion of Instructional Day Devoted to Compensatory Mathematics Instruction For Selected Groups in the Demonstration Districts

KEY:

- TI Students
- NTI Students in TI Schools
- NTI Students in NTI Schools

instructional day devoted to the given instructional activity is shown at the top of each vertical bar. Since each group of students has a slightly different average length instructional day, it is possible for one group to have a smaller amount of instruction than another group and yet spend a greater proportion of the instructional day in that content area.

The data for regular language arts instruction are presented in Figure 3-4 and show that in ten districts Title I students received less instruction than either non-Title I group, while in 12 districts Title I students received less instruction than non-Title I students in the same schools. There does not appear to be any clear pattern of non-Title I students in Title I schools receiving more or less instruction than other non-Title I students. Figure 3-5 presents similar data for compensatory language arts and shows that Title I students in each district received an average of 15 to 30 minutes of compensatory instruction in language arts (with the exception of Newport* which delivered an average of six minutes of compensatory instruction to its Title I students), substantially more in every case than either non-Title I group.**

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*The small sample of Title I students in Newport may account for the somewhat suspect result for this site. A more accurate reflection of the average daily amount of compensatory instruction received by Title I students may be the 39 minutes reported by instructional specialists on the Instructional Schedule (see page 414 for a description of this instrument).

**Please note in these discussions that although all districts emphasize language arts instruction in their Title I programs, all Title I students in these districts do not receive such instruction. This should be considered in interpreting these averages, since if a large number of students receive no language arts (or mathematics) instruction, the average will be somewhat depressed. Data on program delivery patterns, presented in Chapter 4 of this report, will be useful in interpreting these data.

Figures 3-6 and 3-7 present similar data for regular and compensatory mathematics instruction. There is a smaller discrepancy between Title I and non-Title I students in either type of mathematics instruction than there is with respect to language arts. Title I students received about the same amount of regular mathematics instruction as either group of non-Title I students. In districts where a difference exists in terms of compensatory mathematics, Title I students received slightly more; however, the absolute magnitude of such differences was quite small.

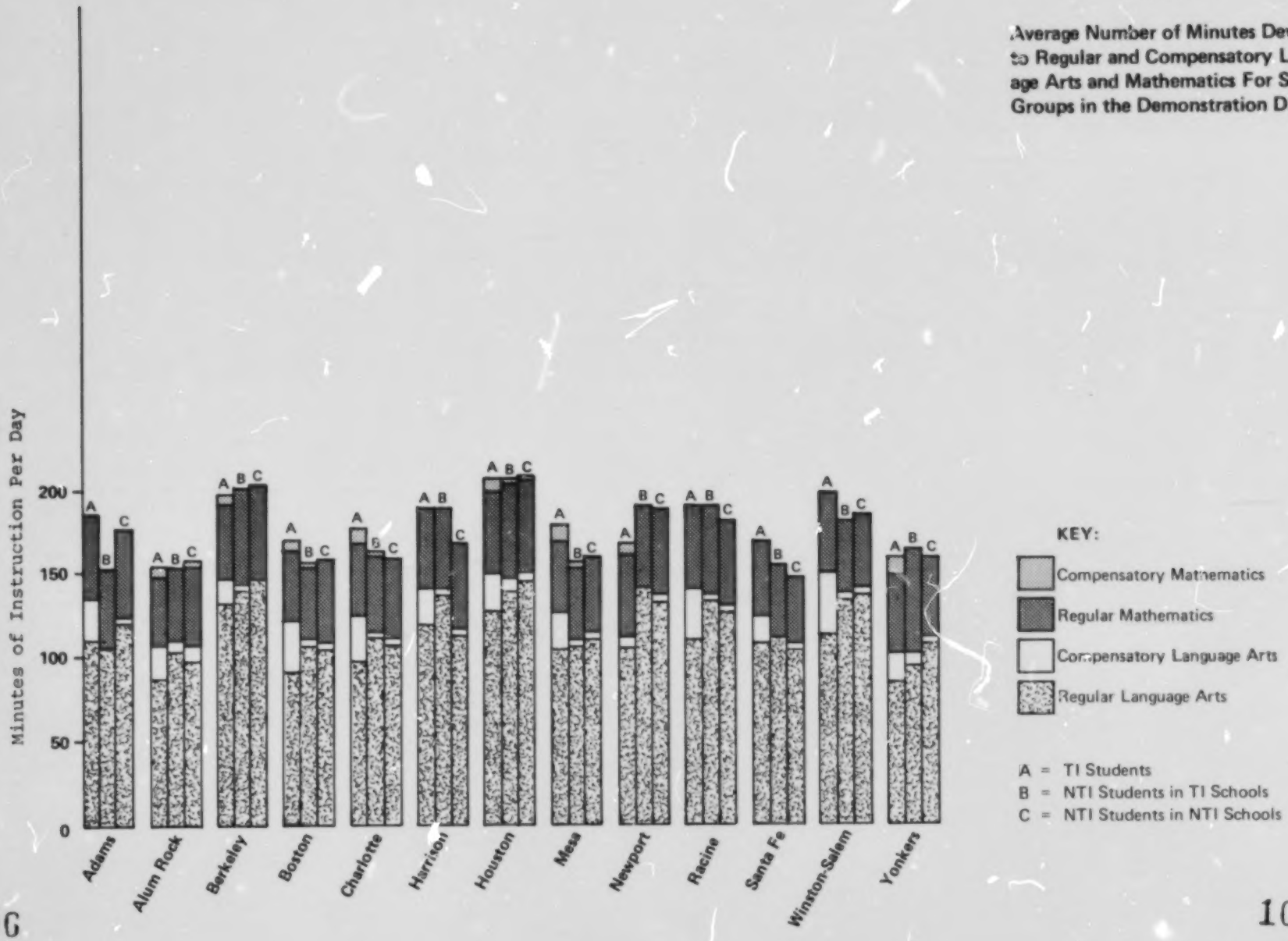
When regular and compensatory instruction are combined, the experiences received by Title I and non-Title I students resemble each other quite closely (See Figure 3-8). While Title I students generally received less regular language arts instruction than non-Title I students in the same schools, they generally received more compensatory language arts instruction. With respect to mathematics, few large discrepancies between Title I and non-Title I students were found for either regular or compensatory instruction.

Turning to content areas other than language arts and mathematics, Appendix B, Figure B-1, shows that in most districts Title I students spent somewhat less time in other academic instruction (science or social studies) than either group of non-Title I students. With respect to non-academic activities, Appendix B, Figure B-2, shows that the amount of such instruction varies across districts. In some districts, such as Newport, Yonkers, and Alum Rock, Title I students received more non-academic instruction than non-Title I students, while in others such as Harrison County and Santa Fe, the opposite was true.

We now present data which show, by district, the results of analyses in which Title I students were compared with non-Title I students in the same school, and in which students in Title I schools (both Title I and non-Title I) were compared with students in non-Title I schools. This section focuses

Figure 3-8

Average Number of Minutes Devoted to Regular and Compensatory Language Arts and Mathematics For Selected Groups in the Demonstration Districts



further on a subset of the data just discussed--Title I/non-Title I student and school differences for language arts.* It also expands upon and further defines the trends noted earlier by examining the amount of regular and compensatory language arts instruction received by sampled students by group size and type of instructor.

Figure 3-9 presents a guide for interpreting the figures to be discussed below. As can be seen in this guide, the horizontal axis for each figure represents the Title I/non-Title I school difference (in minutes), while the vertical axis presents the Title I/non-Title I student difference (in minutes). A positive difference on either axis means the Title I group (either schools or students) received more instruction. The text of Figure 3-9 also explains what it means for a given district to fall into any of the four quadrants of the plot. The results of the analyses from which these figures were derived are presented in Appendix B, Tables B-15 through B-27. Given the type of analysis performed, the regression coefficients presented in these tables may be interpreted as differences between group means. The Technical Appendix (Appendix D) presents a complete description of these procedures.

It can be seen from Figure 3-10 that in ten districts Title I students received less regular language arts instruction than non-Title I students in the same school, and students in Title I schools in eleven districts received less instruction than students in non-Title I schools. Only in Adams County #12 did Title I students receive more regular language arts instruction than non-Title I students, and only in Santa Fe and Harrison County did Title I schools receive more regular language arts instruction than non-Title I schools. Figure 3-11 presents similar comparisons for compensatory language arts and shows that all districts lie in the upper right hand quadrant--both the student and school contrasts favor the Title I group.

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*Cross-district summaries for other student experiences are presented in Appendix B, Figures B-8 through B-17.

Figure 3-9

Example of Two-Dimensional Plot of "X" Type of Instruction

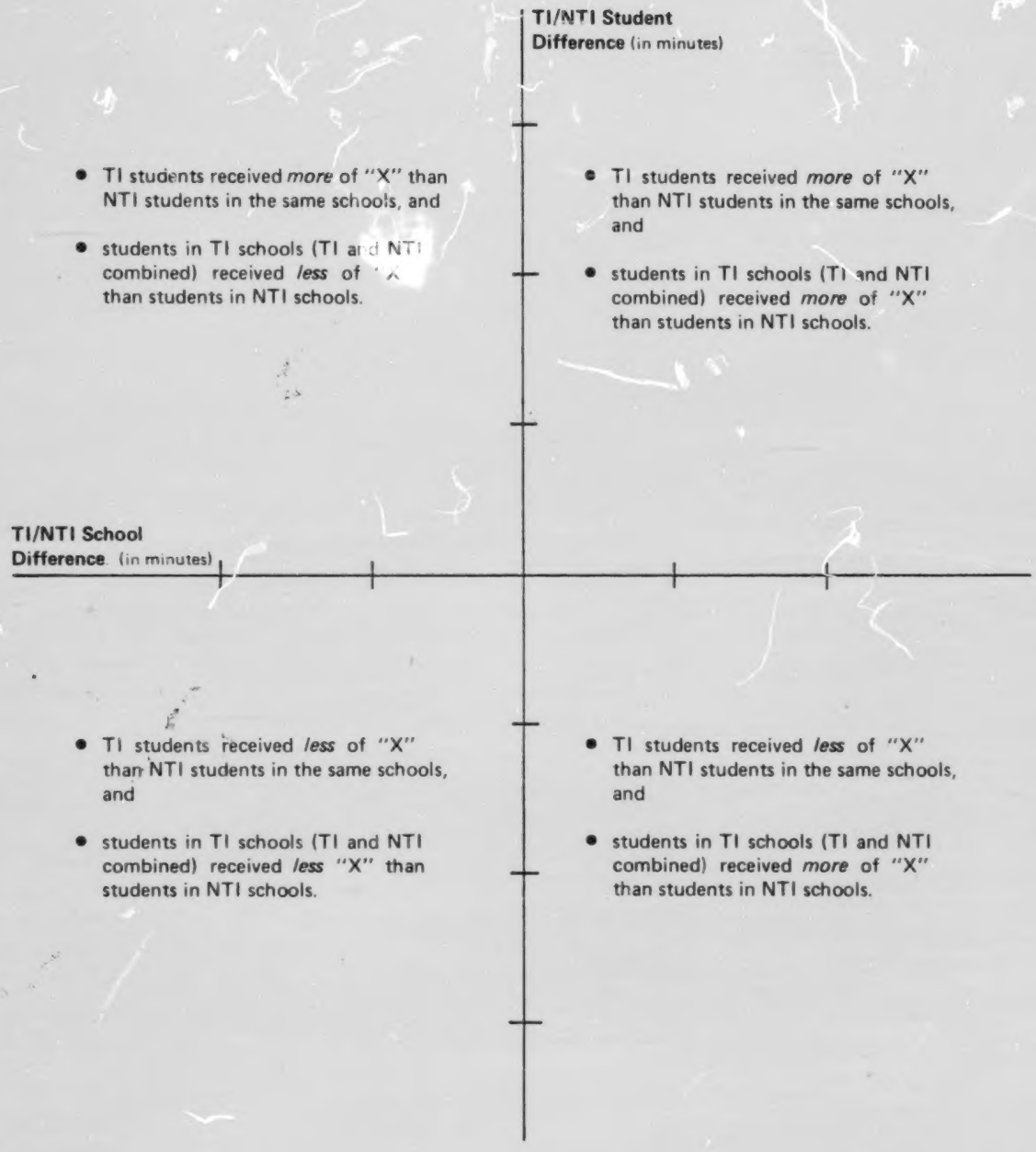

TI/NTI Student Difference (in minutes)
TI/NTI School Difference (in minutes)
• TI students received more of "X" than NTI students in the same schools, and
• students in TI schools (TI and NTI combined) received less of "X" than students in NTI schools.
• TI students received more of "X" than NTI students in the same schools, and
• students in TI schools (TI and NTI combined) received more of "X" than students in NTI schools.
• TI students received less of "X" than NTI students in the same schools, and
• students in TI schools (TI and NTI combined) received less "X" than students in NTI schools.
• TI students received less of "X" than NTI students in the same schools, and
• students in TI schools (TI and NTI combined) received more of "X" than students in NTI schools.

Figure 3-10

Cross-District Summary of Differences Between TI/NTI Students and Between TI/NTI Schools for Average Number of Minutes of Regular Language Arts Instruction

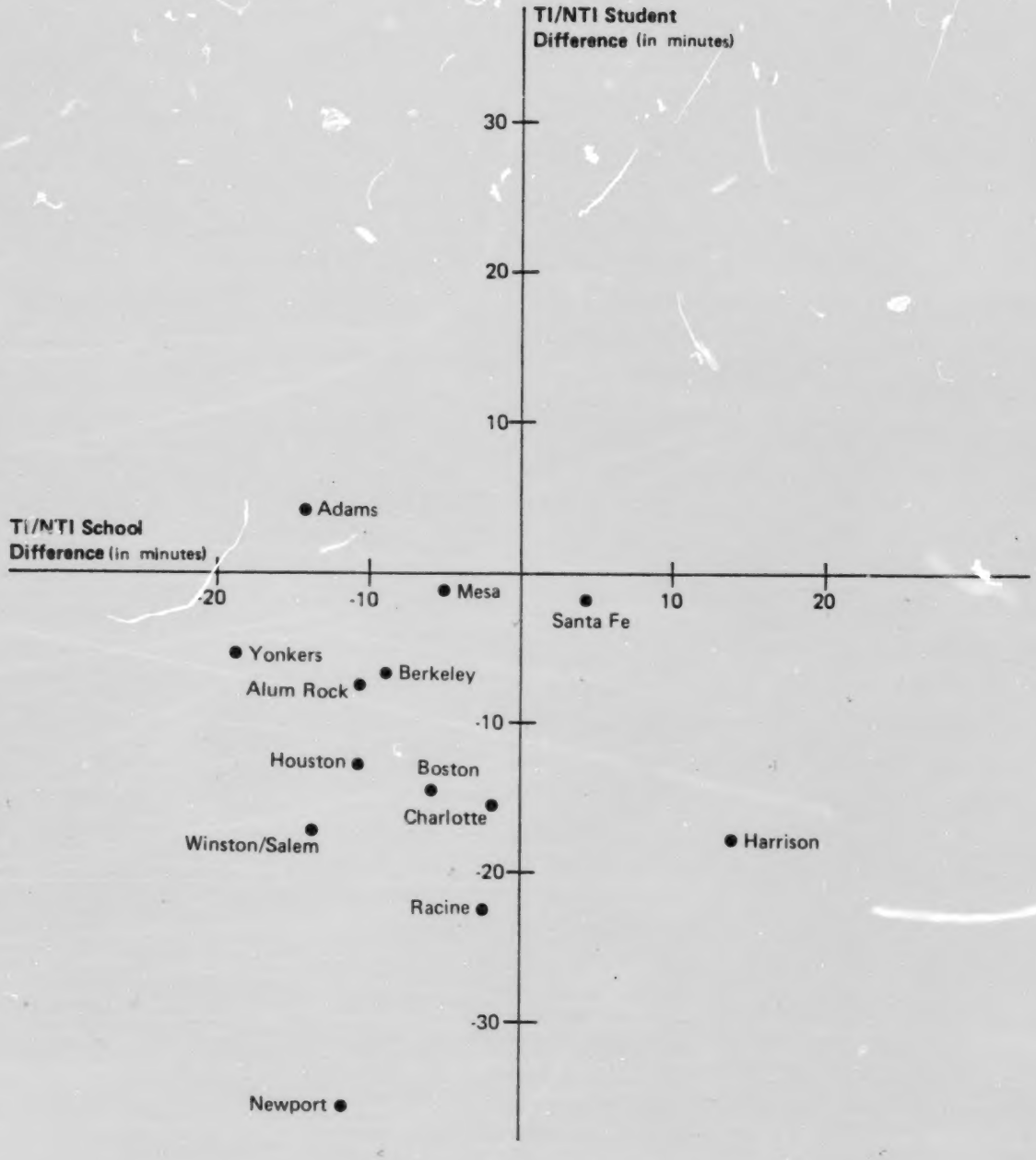
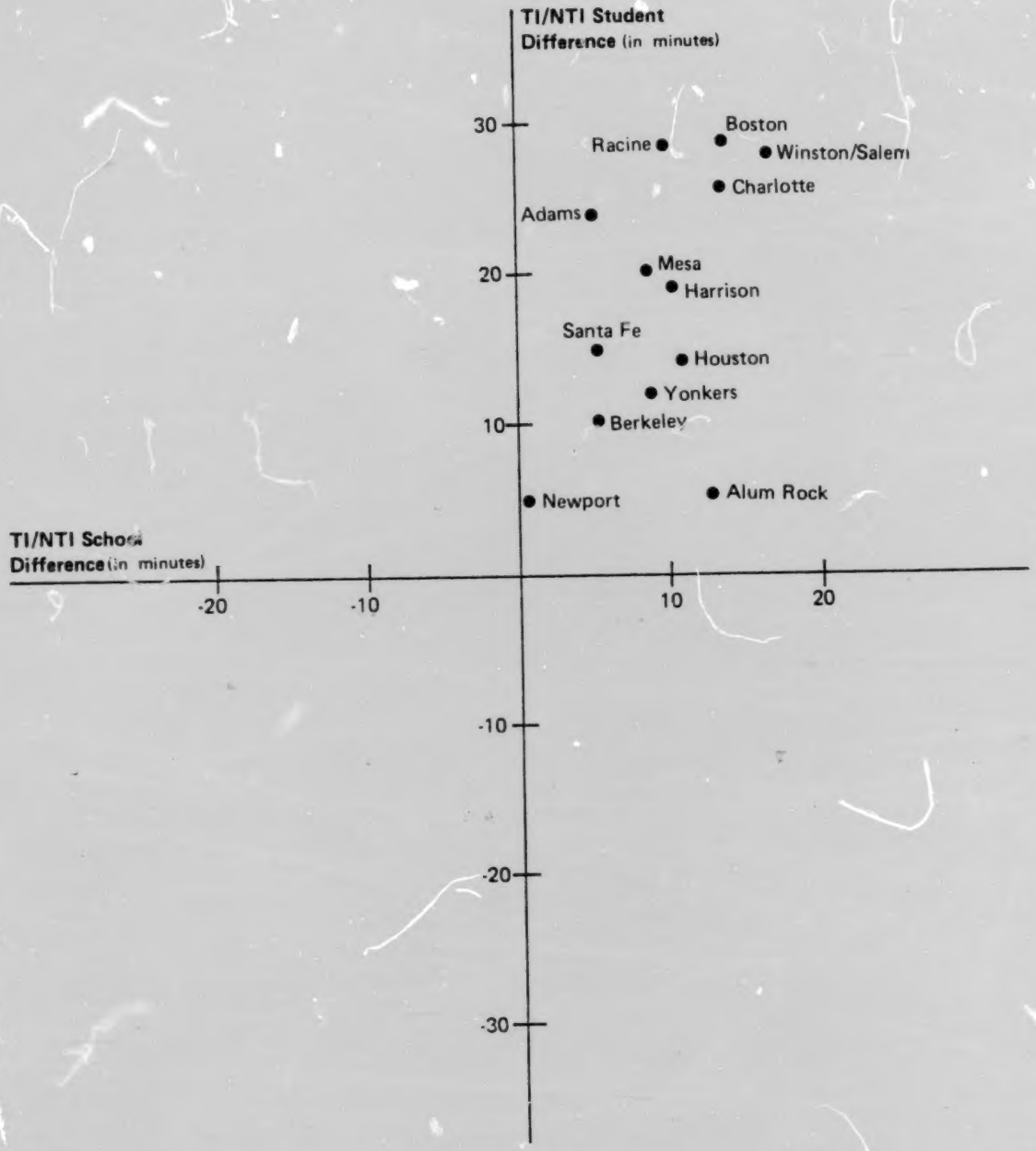


Figure 3-11

Cross-District Summary of Differences Between TI/NTI Students and Between TI/NTI Schools for Average Number of Minutes of Compensatory Language Arts Instruction



A review of these two figures reveals that there is more variation among sites in student differences than in school differences. Figure 3-12 presents the Title I/non-Title I student differences for each site with compensatory language arts plotted on the vertical axis and regular language arts plotted on the horizontal axis. With the exception of Adams County #12, Title I students received more compensatory and less regular language arts instruction than non-Title I students. It should be noted that all districts except Newport and Alum Rock lie above a line drawn at a 45 degree angle to the axes of the graph. Given the interpretation associated with district placement relative to this line, these results mean that in 11 sites the Title I/non-Title I compensatory language arts difference is greater in magnitude than the Title I/non-Title I regular language arts difference--Title I students received about the same or slightly more language arts instruction than non-Title I students when the regular/compensatory distinction is ignored.

From the results presented to this point it appears that Title I students received compensatory language arts services at the expense of regular language arts instruction. The data presented in Table 3.6 support this conclusion. According to teacher reports, the 608 Title I children in the sample received compensatory instruction or special services on 1,141 occasions across the two waves of data collection. About 91 percent of the reported experiences were related to compensatory instruction; nine percent involved special services. Similar percentages for non-Title I children were 73 and 27, suggesting that non-Title I students were less likely to receive compensatory instruction than special services, when compared with the Title I group.

Looking only at compensatory instruction, one can see that the majority of such experiences for both Title I and non-Title I students (58 percent and 54 percent, respectively) were given in place of regular language arts. Therefore, both Title I and non-Title I students lost regular instruction (usually language arts) when compensatory instruction was delivered.

Figure 3-12

Cross-District Summary of Differences Between TI/NTI Students for Average Number of Minutes of Regular and Compensatory Language Arts Instruction

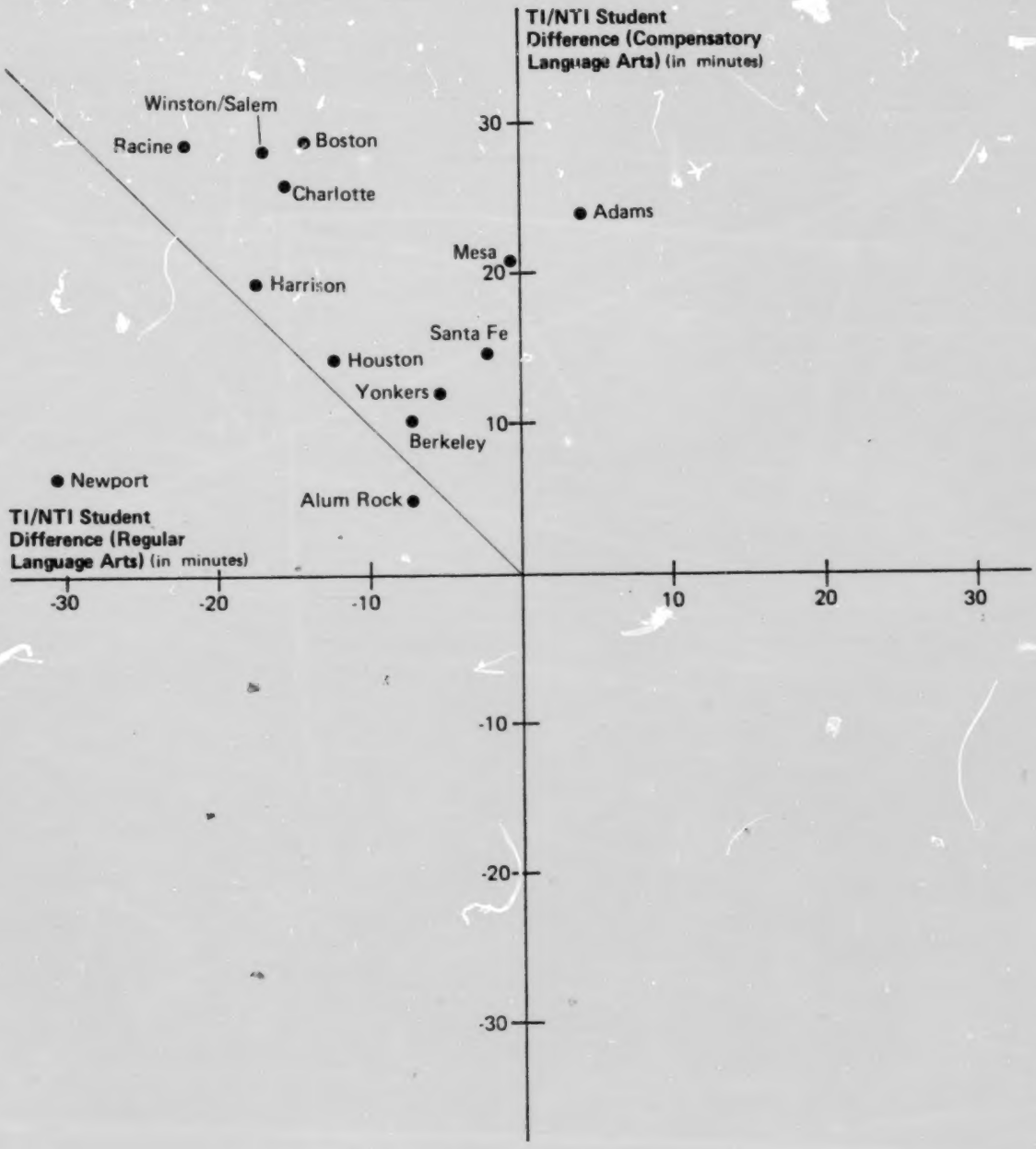


TABLE 3.6

COMPENSATORY INSTRUCTION/SPECIAL SERVICES RECEIVED
BY TYPE OF REGULAR CLASSROOM INSTRUCTION LOST
FOR TITLE I AND NON-TITLE I STUDENTS

TITLE I STUDENTS

TYPE OF SERVICE RECEIVED	TYPE OF REGULAR CLASSROOM INSTRUCTION LOST						TOTAL
	BLANK OR NONE	LANGUAGE ARTS	MATHEMATICS	SOCIAL STUDIES	SCIENCE	OTHER	
COMPENSATORY N	71	601	150	48	64	104	1038
(ROW %)	(7)	(58)	(14)	(5)	(6)	(10)	(91)
SPECIAL N	21	39	15	7	5	16	103
(ROW %)	(20)	(38)	(15)	(7)	(5)	(15)	(9)
TOTAL (N)	92	640	165	55	69	120	1141

NON-TITLE I STUDENTS

TYPE OF SERVICE RECEIVED	TYPE OF REGULAR CLASSROOM INSTRUCTION LOST						TOTAL
	BLANK OR NONE	LANGUAGE ARTS	MATHEMATICS	SOCIAL STUDIES	SCIENCE	OTHER	
COMPENSATORY N	35	244	77	27	21	51	455
(ROW %)	(7)	(54)	(17)	(6)	(5)	(11)	(73)
SPECIAL N	37	71	20	5	10	25	168
(ROW %)	(22)	(42)	(12)	(3)	(6)	(15)	(27)
TOTAL (N)	72	315	97	32	31	76	623

Table 3.7 affords a closer look at the type of regular classroom instruction lost by Title I students in each of the 13 Demonstration sites when compensatory services were delivered. The overall pattern noted in Table 3.6 appears to hold in each site; students receiving compensatory instruction are most likely to lose regular language arts.

3.3.3 Group Size and Instructor Type by Student Type

Two of the most important points made in the discussion of Title I and non-Title I student differences are (1) that most compensatory services are delivered in language arts, rather than mathematics, and (2) that Title I students receiving compensatory language arts appear to lose a variety of other types of instruction, particularly regular language arts. As a result, the total amount of language arts instruction delivered to Title I and non-Title I students is about equal, or slightly favors Title I students. The next question which may be addressed is whether there are qualitative differences in the types of instruction Title I and non-Title I students receive in compensatory and regular language arts classrooms. This can be done by defining type of instruction in terms of the size of the group and type of instructor delivering the instruction. Presumably, smaller class sizes and instruction delivered by specialists are preferable to large group instruction and instruction delivered by regular classroom teachers. Small classes and small instructional groups within them present the opportunity for more individualization of instruction and may, therefore, be used as one measure of the extent to which individualization, one of the goals of Title I, is being realized. The use of specialists, who in the Demonstration districts generally have more training and experience than other providers of instruction, should also confer an advantage to those who receive instruction from them.

TABLE 3.7

TYPE OF REGULAR CLASSROOM INSTRUCTION LOST
WHEN COMPENSATORY SERVICES WERE DELIVERED
FOR TITLE I STUDENTS BY DISTRICT

DISTRICT	TYPE OF REGULAR CLASSROOM INSTRUCTION LOST												TOTAL
	BLANK OR NONE		LANGUAGE ARTS		MATHE-MATICS		SOCIAL STUDIES		SCIENCE		OTHER		
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N
ADAMS CO. #12	3	(21)	3	(21)	0	(0)	1	(7)	5	(36)	2	(14)	14
ALUM ROCK	0	(0)	32	(70)	6	(13)	2	(4)	2	(4)	4	(9)	46
BERKELEY CO.	1	(3)	21	(70)	7	(23)	0	(0)	1	(3)	0	(0)	30
BOSTON	8	(9)	57	(62)	18	(20)	4	(4)	2	(2)	3	(3)	92
CHARLOTTE	25	(10)	130	(53)	30	(12)	19	(8)	11	(5)	28	(12)	243
HARRISON CO.	2	(4)	33	(59)	2	(4)	1	(7)	7	(13)	8	(14)	56
HOUSTON	15	(7)	119	(55)	40	(18)	9	(4)	17	(8)	17	(8)	217
MESA	2	(3)	44	(57)	26	(34)	1	(1)	2	(3)	2	(3)	77
NEWPORT	0	(0)	3	(60)	2	(40)	0	(0)	0	(0)	0	(0)	5
RACINE	2	(4)	35	(64)	3	(5)	1	(2)	5	(9)	9	(16)	55
SANTA FE	1	(2)	39	(75)	4	(8)	2	(4)	3	(6)	3	(6)	52
WINSTON-SALEM	8	(81)	59	(59)	0	(0)	2	(2)	9	(9)	22	(22)	100
YONKERS	4	(8)	26	(51)	12	(24)	3	(6)	0	(0)	6	(12)	51
TOTAL	71	(7)	601	(58)	150	(14)	48	(6)	64	(6)	104	(10)	1,038

Table 3.8 presents the percentage of regular and compensatory language arts instruction delivered in individual, small, and medium size groups to Title I and non-Title I students in each Demonstration district. Table 3.9 presents similar data for type of instructor. It is clear from these data that the compensatory language arts instruction received by Title I students is quite different from the regular language arts instruction received by these same students and by non-Title I students. Almost all of the compensatory instruction delivered to Title I students is offered in small or medium groups (85 percent across districts), compared with only half of the regular classroom instruction (47 percent across districts). The regular/compensatory difference is just as striking with respect to the type of teacher delivering the instruction. Fifty-four percent of compensatory language arts instruction is delivered by instructional specialists, compared with only two percent of regular classroom instruction. On the other hand, the regular language arts instruction received by Title I students is quite similar to that received by non-Title I students with respect to group size and instructor type.

3.3.4 Individualization of Instruction by Student Type

Additional information on the qualitative aspects of the regular and compensatory language arts instruction received by Title I and non-Title I students was obtained from the Program Description Modules completed by teachers and instructional specialists.* The modules included questions on the daily activities carried out by teachers to diagnose and prescribe instruction tailored to the individual needs of students. In general, the analyses of these data revealed that for regular instruction, Title I and non-Title I students were treated in a similar manner.** Compensatory instruction for Title I

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*Due to the small sizes of the compensatory mathematics programs in these districts, and, therefore, the small number of sample students receiving such instruction, a detailed analysis for mathematics has not been conducted.

**For these analyses, non-Title I students were treated as a single comparison group, regardless of type of school attended.

TABLE 3.8

BREAKDOWN OF REGULAR AND COMPENSATORY LANGUAGE ARTS BY GROUP SIZE FOR TITLE I AND NON-TITLE I STUDENTS IN THE DEMONSTRATION DISTRICTS*

DISTRICT	PERCENTAGE OF COMPENSATORY LANGUAGE ARTS			PERCENTAGE OF REGULAR LANGUAGE ARTS					
	TITLE I			TITLE I			NON-TITLE I		
	INDIVIDUAL	SMALL	MEDIUM	INDIVIDUAL	SMALL	MEDIUM	INDIVIDUAL	SMALL	MEDIUM
ADAMS COUNTY #12	7	30	63	27	11	28	12	9	27
ALUM ROCK	42	34	23	30	20	21	18	16	39
BERKELEY COUNTY	25	46	16	10	12	19	10	5	33
BOSTON	6	47	45	10	18	48	11	14	48
CHARLOTTE	16	51	34	15	16	38	17	7	35
HARRISON COUNTY	3	38	59	7	8	65	9	5	28
HOUSTON	6	29	61	6	9	37	9	5	39
MESA	7	90	3	15	13	22	19	9	19
NEWPORT	0	100	0	12	34	17	17	9	30
RACINE	20	80	0	8	4	39	5	2	18
SANTA FE	10	73	17	14	27	32	14	16	35
WINSTON-SALEM	6	50	44	7	9	44	9	6	39
YONKERS	14	53	29	23	21	27	25	10	30
AVERAGE OF DISTRICT MEANS	12	55	30	14	16	31	13	9	32

*The percentage of time spent in large group instruction is not portrayed in this table. Therefore, individual site totals and the sum of averages across sites may not equal 100%.

TABLE 3.9

BREAKDOWN OF REGULAR AND COMPENSATORY LANGUAGE ARTS BY TEACHER TYPE FOR TITLE I AND NON-TITLE I STUDENTS IN THE DEMONSTRATION DISTRICTS*

DISTRICT	PERCENTAGE OF COMPENSATORY LANGUAGE ARTS			PERCENTAGE OF REGULAR LANGUAGE ARTS					
	TITLE I			TITLE I			NON-TITLE I		
	PROFESSIONAL	INSTRUCTIONAL SPECIALIST	PARAPROFESSIONAL	PROFESSIONAL	INSTRUCTIONAL SPECIALIST	PARAPROFESSIONAL	PROFESSIONAL	INSTRUCTIONAL SPECIALIST	PARAPROFESSIONAL
ADAMS COUNTY #12	0	83	10	67	0	3	70	1	6
ALUM ROCK	10	16	62	53	1	21	52	1	18
BERKELEY COUNTY	11	46	41	79	0	10	77	2	7
BOSTON	4	70	24	70	4	13	66	2	12
CHARLOTTE	0	74	24	70	5	8	69	4	6
HARRISON COUNTY	2	75	22	76	1	8	77	0	5
HOUSTON	5	68	26	80	2	6	78	2	4
MESA	1	14	85	70	3	10	64	2	9
NEWPORT	0	67	33	56	0	2	60	2	4
RACINE	0	9	90	81	1	8	80	3	7
SANTA FE	4	57	39	64	2	13	67	1	14
WINSTON-SALEM	1	71	22	75	3	4	69	2	5
YONKERS	5	48	34	54	4	12	54	4	11
AVERAGE OF DISTRICT MEAN	3	54	39	69	2	9	68	2	8

*The "No Adult Involved" category is not included in this table.

students, however, was provided in smaller groups with greater use of materials keyed to individual needs. In addition, standardized achievement and diagnostic tests were used more often in planning compensatory instruction and specific performance objectives were used more often in delivering that instruction. These findings generally support the notion that compensatory instruction is qualitatively different from the regular instruction received by both Title I students and their non-Title I counterparts.

With respect to regular language arts instruction, Table 3.10 displays the mean scores for Title I and non-Title I students on the "Individually Prescribed Activities and Materials Scale". The higher the value on this scale, the more frequently teachers assign tasks to and work with small groups and the more frequently they utilize individualized materials. As can be seen in the table, there are only two statistically significant differences on this scale between the Title I and non-Title I groups. In both Charlotte and Mesa, Title I students appear to receive more individualized regular language arts instruction than their non-Title I counterparts. Tables B-29 through B-33 in Appendix B present additional data on the qualitative aspects of the regular language arts instruction received by Title I versus non-Title I students. Inspection of these tables reveals few, if any, noteworthy differences between the two student groups.

While regular instruction is delivered in a similar manner for Title I and non-Title I students, a number of significant differences were found in the degree of individualization of regular and compensatory instruction for Title I students.* These

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*The analyses reported here consist simply of t-tests of the differences between compensatory and regular instruction. Since many of the questions of interest are categorical, the t-tests are computed for the proportions of teachers or specialists responding to a particular category. Generally, the category most indicative of individualization is presented. For instance, for the question about how materials are utilized, the proportions of teachers endorsing the category "different materials for different children" are compared.

TABLE 3.10

A COMPARISON OF MEANS FOR TITLE I AND NON-TITLE I STUDENTS ON THE INDIVIDUALLY PRESCRIBED ACTIVITIES AND MATERIALS SCALE***

District **	Title I Group Mean	Non-Title I Group Mean	Difference (Title I - Non-Title I)
Adams County #12	53.38	46.34	7.04
Alum Rock	54.91	55.59	- .68
Berkeley County	46.04	45.53	.51
Boston	50.22	49.71	.51
Charlotte	52.24	49.93	2.31*
Harrison County	45.31	46.56	-1.25
Houston	47.44	47.49	- .05
Mesa	51.83	49.26	2.57*
Racine	46.13	44.81	1.32
Santa Fe	54.62	52.07	2.55
Winston-Salem	48.01	48.66	- .65
Yonkers	54.07	52.85	1.22

*Indicates that difference is significant at the .05 level.

**Small sample sizes for Newport precluded their inclusion in these analyses.

***The higher the value on this scale, the more frequently teachers assign tasks to and work with small groups and the more frequently they utilize individualized materials.

included differences on the Individually Prescribed Activities and Materials Scale and on variables measuring the use of standardized instruments for assessment and planning, performance objectives, individualized assigrment of materials and student progress reports. We turn now to a discussion of these findings.

Table 3.11 presents results for the Individually Prescribed Activities and Materials Scale. As can be seen in the table, individually prescribed instruction is more frequently provided to Title I students in their compensatory than in their regular language arts classes. In fact, significant differences favoring compensatory language arts instruction were found in eleven of the twelve sites for which data were available.

Table 3.12 indicates the percentages of respondents who report using either standardized achievement or diagnostic tests to assess the entry level performance and to plan instruction for Title I students. Again, a larger percentage of compensatory (as opposed to regular) language arts instructors report using standardized tests for evaluation and placement. As noted in the table, seven differences were significant at the .05 level.

With respect to the use of performance objectives, four variables are discussed here:

1. the percentage of respondents who use performance objectives;
2. the percentage that have access to materials based on performance objectives;
3. the percentage that state objectives for individual students; and,
4. the percentage basing objectives on both content and mastery.

In almost all cases (the exceptions being Alum Rock and Berkeley County), a larger percentage of compensatory than regular language arts instructors use performance objectives in their instruction of Title I students (see Table 3.13). However, only three of these differences are significant at the .05 level. Except for Adams County #12, more compensatory specialists report

TABLE 3.11

A COMPARISON OF MEANS ON THE INDIVIDUALLY PRESCRIBED ACTIVITIES AND MATERIALS SCALE FOR REGULAR AND COMPENSATORY LANGUAGE ARTS INSTRUCTION RECEIVED BY TITLE I STUDENTS***

District**	Regular Language Arts	Compensatory Language Arts	Difference (Compensatory - Regular)
Adams County #12	46.54	62.09	15.55*
Alum Rock	55.32	60.45	5.13
Berkeley County	46.07	64.61	18.54*
Boston	49.90	60.43	10.53*
Charlotte	50.62	70.32	19.70*
Harrison County	45.86	62.13	16.27*
Houston	47.59	68.59	21.00*
Mesa	50.20	59.79	9.59*
Racine	45.81	66.55	20.74*
Santa Fe	52.72	60.11	7.39*
Winston-Salem	48.21	75.00	26.79*
Yonkers	53.08	66.19	13.11*

*Indicates that difference is significant at the .05 level.

**Small sample sizes for Newport precluded their inclusion in these analyses.

***The higher the value on this scale, the more frequently teachers assign tasks to and work with small groups and the more frequently they utilize individualized materials.

TABLE 3.12

A COMPARISON OF THE PERCENTAGE OF REGULAR AND COMPENSATORY LANGUAGE ARTS INSTRUCTORS USING STANDARDIZED ACHIEVEMENT OR DIAGNOSTIC TESTS TO ASSESS THE ENTRY LEVEL PERFORMANCE AND TO PLAN INSTRUCTION OF TITLE I STUDENTS

District**	Regular Language Arts (%)	Compensatory Language Arts (%)	Difference (Compensatory %- Regular %)
Adams County #12	43	100	57*
Alum Rock	77	100	23
Berkeley County	58	82	24
Boston	73	95	22*
Charlotte	53	98	45*
Harrison County	56	89	33*
Houston	70	93	23*
Mesa	35	90	55*
Racine	83	88	5
Santa Fe	59	73	14
Winston-Salem	60	100	40*
Yonkers	85	91	6

*Indicates that difference is significant at the .05 level.

**Small sample sizes for Newport precluded their inclusion in these analyses.

TABLE 3.13

A COMPARISON OF THE PERCENTAGE OF REGULAR AND COMPENSATORY LANGUAGE ARTS INSTRUCTORS WHO SET SPECIFIC PERFORMANCE OBJECTIVES TO MEASURE PROGRESS OF TITLE I STUDENTS

District**	Regular Language Arts (%)	Compensatory Language Arts (%)	Difference (Compensatory %- Regular %)
Adams County #12	72	86	14
Alum Rock	91	75	-16
Berkeley County	92	69	-23*
Boston	88	100	12*
Charlotte	82	90	8
Harrison County	77	81	4
Houston	81	87	6
Mesa	78	83	5
Racine	76	91	15
Santa Fe	91	100	9
Winston-Salem	85	100	15*
Yonkers	79	89	10

*Indicates that difference is significant at the .05 level.

**Small sample sizes for Newport precluded their inclusion in these analyses.

having easy access to materials keyed to performance objectives (see Table 3.14). Five of these differences are significant at the .05 level. Compensatory instructors are also more likely than regular instructors to state performance objectives for individual students rather than for a subgroup of the total group of children. Table 3.15 displays the differences between the two types of instructors. Eight of the twelve differences are significant at the .05 level.

Finally, with regard to the nature of performance objectives, we found that in seven of the twelve sites, compensatory specialists, more than regular instructors, base performance objectives on both content and mastery (see Table 3.16). Four of these differences are statistically significant. Our findings also indicate that regular instructors were more apt to base performance objectives on both content and mastery in four sites; however, none of these differences were significant at the .05 level.

Turning now to the use of classroom materials, Table 3.17 gives the percentages of respondents who use different materials for different children. In 8 of the 12 sites, compensatory instruction specialists are more likely to use different materials. Five of these differences are significant at the .05 level. None of the three differences showing that regular instructors are more likely to use different materials (Boston, Charlotte, and Mesa) are statistically significant.

Table 3.18, the last table in this section, presents means on a four-point variable that indicates the frequency with which specialists and teachers record their students' progress. The values of the variable range from "less than monthly" (1) to "five time weekly" (4), so a larger mean indicates more frequent recording of individual progress. In only four sites (Alum Rock, Berkeley, Winston-Salem, and Yonkers) is progress recorded more frequently for compensatory instruction, and only two of these

TABLE 3.14

A COMPARISON OF THE PERCENTAGE OF REGULAR AND COMPENSATORY LANGUAGE ARTS INSTRUCTORS OF TITLE I STUDENTS WHO HAVE EASY ACCESS TO SPECIFIC MATERIALS KEYED TO PERFORMANCE OBJECTIVES

District **	Regular Language Arts (%)	Compensatory Language Arts (%)	Difference (Compensatory%- Regular %)
Adams County #12	84	83	- 1
Alum Rock	67	100	33
Berkeley County	56	100	44*
Boston	63	80	17*
Charlotte	71	83	12
Harrison County	56	61	5
Houston	68	92	24*
Mesa	90	100	10
Racine	74	97	23*
Santa Fe	69	100	31*
Winston-Salem	85	96	11
Yonkers	58	82	24

*Indicates that difference is significant at the .05 level.

**Small sample sizes for Newport precluded their inclusion in these analyses.

TABLE 3.15

A COMPARISON OF THE PERCENTAGE OF REGULAR AND COMPENSATORY LANGUAGE ARTS INSTRUCTORS OF TITLE I STUDENTS WHOSE OBJECTIVES ARE STATED FOR INDIVIDUAL STUDENTS RATHER THAN GROUPS OF STUDENTS

District**	Regular Language Arts (%)	Compensatory Language Arts (%)	Difference (Compensatory % - Regular %)
Adams County #12	1	71	70*
Alum Rock	28	50	22
Berkeley County	20	15	- 5
Boston	10	76	66*
Charlotte	6	68	62*
Harrison County	0	46	46*
Houston	4	65	61*
Mesa	11	28	17
Racine	12	85	73*
Santa Fe	15	27	12
Winston-Salem	7	79	72*
Yonkers	23	70	47*

*Indicates that difference is significant at the .05 level.

**Small sample sizes for Newport precluded their inclusion in these analyses.

TITLE 3.16

A COMPARISON OF THE PERCENTAGE OF REGULAR AND COMPENSATORY LANGUAGE ARTS INSTRUCTORS OF TITLE I STUDENTS WHOSE PERFORMANCE OBJECTIVES DIFFER FOR CHILDREN BY BOTH CONTENT AND LEVEL OF MASTERY

District**	Regular Language Arts (%)	Compensatory Language Arts (%)	Difference (Compensatory % - Regular %)
Adams County #12	46	29	-17
Alum Rock	66	50	-16
Berkeley County	64	54	-10
Boston	58	64	6
Charlotte	60	74	14*
Harrison County	38	64	26*
Houston	44	69	25*
Mesa	44	22	-22
Racine	44	52	8
Santa Fe	69	100	31*
Winston-Salem	62	71	9
Yonkers	60	60	0

*Indicates that difference is significant at the .05 level.

**Small sample sizes for Newport precluded their inclusion in these analyses.

TABLE 3.17

A COMPARISON OF THE PERCENTAGE OF REGULAR AND COMPENSATORY LANGUAGE ARTS INSTRUCTORS USING DIFFERENT MATERIALS WITH DIFFERENT CHILDREN IN THEIR INSTRUCTION OF TITLE I STUDENTS

District**	Regular Language Arts (%)	Compensatory Language Arts (%)	Difference (Compensatory % - Regular %)
Adams County #12	16	43	27
Alum Rock	45	25	-20
Berkeley County	20	77	57*
Boston	46	40	- 6
Charlotte	34	29	- 5
Harrison County	15	29	14
Houston	25	54	19*
Mesa	31	22	- 9
Racine	15	27	12
Santa Fe	41	73	32*
Winston-Salem	24	75	51*
Yonkers	36	75	39*

*Indicates that difference is significant at the .05 level.

**Small sample sizes for Newport precluded their inclusion in these analyses.

TITLE 3.18

A COMPARISON OF MEANS INDICATING THE FREQUENCY WITH WHICH REGULAR AND COMPENSATORY INSTRUCTORS RECORD THE PROGRESS OF TITLE I STUDENTS

District**	Regular Language Arts	Compensatory Language Arts	Difference (Compensatory-Regular)
Adams County #12	2.97	2.57	-.40
Alum Rock	2.92	3.50	.58
Berkeley County	3.00	3.46	.46*
Boston	2.97	2.73	-.24
Charlotte	3.05	2.66	-.39*
Harrison County	3.06	2.21	-.85*
Houston	3.05	2.90	-.15
Mesa	2.98	2.17	-.81*
Racine	3.20	3.00	-.20
Santa Fe	3.04	1.82	-1.22*
Winston-Salem	3.02	3.61	.59*
Yonkers	2.99	3.25	.26

*Indicates that difference is significant at the .05 level.

**Small sample sizes for Newport precluded their inclusion in these analyses.

comparisons reach the .05 level of significance. In the other sites, progress is recorded more frequently for regular instruction. Half of these differences are statistically significant.

In sum, the general picture conveyed by the results relating to the qualitative aspects of instruction is one of consistently more individualization of instruction for compensatory than for regular language arts instruction. This individualization is characterized chiefly by larger amounts of actual instruction taking place in small groups. In most, but not all, cases this is accompanied by the use of performance objectives at the individual level and by the availability of materials keyed to these objectives. These materials are also generally based on both content and mastery. In compensatory instruction, different classroom materials are usually used for different individuals but progress is not necessarily recorded more frequently than in regular instruction.

4.0 PROGRAM DELIVERY

4.1 Research Objectives

There are two primary reasons for exploring 1975-76 program delivery patterns in the Demonstration districts:

- Description of program delivery in the 1975-76 school year establishes a baseline for the analysis of change; and
- Comparison of program delivery in the Demonstration districts with that in the probability sample of Title I districts described in the National Survey* is useful in assessing the generalizability of Demonstration findings to other states.

Addressing change in program delivery patterns is important for several reasons. Some of these changes may be made for their own sake. That is, given the incentive to examine existing program operations, together with freedom from existing regulations, districts may seize the opportunity for programmatic change, independent of any allocation policy changes. Such changes shed light on the probable consequences of more flexible program guidelines and regulations with respect to Title I. In addition, districts may change their program delivery patterns as a result of changes in allocation policies. To accommodate an increase in the number of schools and/or students served, districts will either have to dilute the services students receive or change the nature of the programs offered.

Comparison with the National Survey serves two purposes. If Demonstration districts are similar to a nationally representative sample of districts in terms of program delivery, then findings with respect to student experiences

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*"Evaluating Compensatory Education: An Interim Report on the NIE Compensatory Education Study" (Washington, D. C.: National Institute of Education, 1976).

under existing regulations have more generalizability. So too, do findings with respect to Demonstration changes and the outcomes of such changes.

Several aspects of program delivery are discussed in this chapter. These are:

- activities and services;
- staffing and staff utilization;
- instructional operations (location, class size, length and scheduling of instruction);
- individualization of instruction; and
- ancillary activities (staff development and parent involvement).*

These issues are comparable to, and in fact extend somewhat, the research focus on the National Survey on "features of instruction which appear to be especially important in determining children's learning, i.e., individualized instruction, instructional setting, time spent in instruction, and teacher training."** The emphasis on individualization of instruction is consistent with the Congressional directive (to NIE) that the study of compensatory education analyze "the effectiveness of methods and procedures for meeting the educational needs of children including the use of individual written educational plans for children."***

The discussion of program delivery patterns focuses on Title I programs and State compensatory programs, which operated in eight of the 13 districts. Site Descriptions revealed that in addition to these efforts, other federal compensatory programs operated in the 13 sites during

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*Costs will be discussed fully in the Cost Analysis, which will be presented at a later time.

**Ibid., p. xv.

***Ibid., III-45.

1975-76.* Compared to Title I and State programs, however, these additional programs generally accounted for smaller portions of the total compensatory education effort. Also, Title I and State programs share the same objectives, are often closely related, and in some cases function as a "compensatory package." These facts, coupled with Congressional interest in documenting the operations and interrelationships between these funding sources, underlie this focus.

Data for the Program Delivery Chapter were drawn from four different sources and three respondent groups:

- Site Description Reports, based upon a synthesis of district documents and informal interviews conducted with key administrative staff members;
- Principal Questionnaires, administered to the universe of elementary school principals in each district;
- Instructional Schedules, administered to the universe of elementary language arts and mathematics specialists, funded by any compensatory program operating in the district; and
- Compensatory Program Description Modules, administered to the same group as the Instructional Schedules.**

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*Compensatory is defined as addressing educational disadvantage. Funds for special education and vocational education are not considered compensatory. Programs operating in 1975-76 were ESAA (four sites), Title VII (four sites), Follow Through (two sites), ESEA Title I Migrant (two sites), and Title IV (two sites). A comprehensive picture of the programs operating in each site is presented in Catherine Baltzell and Nancy Brigham (Eds.), "The Site Descriptions," Abt Associates, 1977.

**For a discussion of sampling, instrumentation, and analytic methods, see Appendix D.

4.2 Overview of Findings

Presented below is a summary of key program delivery findings. Both baseline descriptions and comparisons with the National Survey are addressed for the following areas of investigation:

- activities and services;
- instructional operations; and
- individualization.

Activities and Services (See Section 4.3)

Generally, Title I and State programs in the Demonstration districts provided both instructional and support services, but concentrated heavily on the former. Reading and language arts constituted the principal focus of the instructional effort, with mathematics, pre-kindergarten and ESL/bilingual activities being of lesser importance. Services were extended to children in a range of grade spans, but the major efforts were directed at grades 1-6.

Activities and services in the Demonstration districts were quite similar to National Survey activities and services with one exception, the proportion of districts offering support services (see Table 4.1). The apparent disparity in support services becomes less significant when the level of support services in the Demonstration districts is examined. Demonstration districts typically allotted 5% or less of Title I funds to support services. In fact, two districts provided services in less than 5% of their schools. Four others funded a very small number of services through Title I. If these six districts are excluded, 54% of the Demonstration districts are classified as offering support services, a figure comparable to National Survey results.

Instructional Operations (See Section 4.5)

Table 4.1 also summarizes data on instructional operations. However, to communicate these more effectively a

TABLE 4.1

COMPARISON OF DEMONSTRATION AND THE NATIONAL SURVEY DISTRICTS
ON SELECTED ASPECTS OF PROGRAM DELIVERY

AREA OF INVESTIGATION	DEMONSTRATION DISTRICTS 1975-76	NATIONAL SURVEY DISTRICTS
ACTIVITIES AND SERVICES	-- 100% of Demonstration districts provided both instructional and support services	-- 98% of the sample districts provided some instructional services. Some support services are offered by 59% of the districts.
	-- Reading and language arts accounted for 70% of Title I budget.	-- Reading and language arts accounted for 63% of the Title I budget.
	-- The average share spent on mathematics was 17%.	-- The average share spent on mathematics was 19%.
	-- 46% of the districts supported kindergarten programs through Title I.	-- 38% of the districts supported kindergarten programs through Title I.
INSTRUCTIONAL OPERATIONS	-- Students spent approximately 175 minutes per week in Title I compensatory reading and language arts instruction.	-- Students spent approximately 238 minutes per week in compensatory reading and language arts instruction.
	-- Students spent approximately 3 hours per week in Title I compensatory math instruction.	-- Students spent approximately 3 hours per week in compensatory math instruction.
	-- Title I compensatory reading/language arts instruction was given in groups containing about 8 students.	-- Compensatory reading instruction was given in groups of about 8 students at the elementary level.

(continues)

TABLE 4.1

(continued)

AREA OF INVESTIGATION	DEMONSTRATION DISTRICTS 1975-76	NATIONAL SURVEY DISTRICTS
INSTRUCTIONAL OPERATIONS (continued)	-- An average class for Title I compensatory math instruction contained 10 students. -- 80% of schools report that Title I compensatory language arts/reading instruction took place outside the child's regular classroom. -- 74% of schools report that Title I math took place outside the regular classroom.	-- An average class for compensatory math instruction contained 14 students. -- 85% of compensatory reading instruction and 63% of language arts instruction took place outside the child's regular classroom. -- 62% of compensatory math instruction took place outside the regular classroom.
INDIVIDUALIZATION	-- For diagnostic purposes 59% of compensatory language arts teachers report using standardized diagnostic test scores; 64%, scores on tests keyed to instructional objectives. -- 44% of compensatory language arts teachers report assigning tasks on individual student basis; 25%, to small groups; 27%, to whole class. -- 43% of compensatory language arts teachers report recording student progress 1-4 times per week.	-- For diagnostic purposes 44% of compensatory language arts teachers used standardized diagnostic test scores; 24%, scores on tests keyed to instructional objectives. -- 43% of compensatory language arts teachers assigned tasks to individual students; 45%, to small groups; 14%, to whole class. -- 52% of compensatory language arts teachers report recording progress 1-4 times per week.

concise picture of an "average" elementary school has been constructed. An elementary child enrolled in this school's Title I reading and language arts program in the elementary grades in the Demonstration districts:

- receives 38 minutes of compensatory instruction for 4.6 days per week (175 minutes per week) during the entire school year;
- receives compensatory instruction in his/her regular school but outside his/her regular classroom, most likely in a room set aside for compensatory education;
- receives compensatory instruction in groups of either two to five or six to ten students; and
- receives compensatory instruction from specialists and/or aides.

In comparison, an elementary school child enrolled in a compensatory reading and language arts program in the the National Survey sample:

- receives approximately 238 minutes per week of compensatory instruction;
- receives instruction in his/her regular school but outside his regular classroom;
- receives instruction in a class containing about eight students; and
- receives compensatory instruction from a subject area specialist.

As these findings show, the Demonstration districts are once again quite similar to the National Survey sample. The most substantial discrepancy is in minutes per week of compensatory instruction. Demonstration districts appear to offer 63 minutes less per week of compensatory reading and language arts instruction.

Individualization of Instruction (See Section 4.6)

Finally, Table 4.2 displays comparison data on those dimensions of individualization for which Demonstration

TABLE 4.2

PERCENTAGE OF TITLE I FUNDS EXPENDED AND PERCENTAGE OF TITLE I STUDENTS SERVED BY ACTIVITY IN 11 DEMONSTRATION SITES*

(Data Source: Site Descriptions)

DISTRICT	INSTRUCTIONAL ACTIVITY															
	READING		MATHEMATICS		PRE-KINDERGARTEN AND KINDERGARTEN		BILINGUAL/ ESL		INSTRUCTION FOR SPECIAL GROUPS (e.g., SPECIAL EDUCATION)		SUPPORT SERVICES: HEALTH, SOCIAL SERVICES, PSYCHO-LOGICAL, HOME-SCHOOL LIAISON	PAC	INSERVICE
	% STUDENTS	% FUNDS	% STUDENTS	% FUNDS	% STUDENTS	% FUNDS	% STUDENTS	% FUNDS	% STUDENTS	% FUNDS	% FUNDS	% FUNDS	% FUNDS
ADAMS COUNTY #12	70	81	29	13							02	.01	.03
BERKELEY	100	95**							NA	NA	05		
BOSTON	70	65	08	07	09	06	06	06	04	06	01	03	01
CHARLOTTE	68	59	30	33					04		02	<1	02
HARRISON	52	64***							03		03	<1	
HOUSTON	77	40	11	08	05	30			NA		15		<1
MESA	49	58	11	24	05	17	02	01					
NEWPORT	88	91			05	05					04		
RACINE	58	50			40	47			01	01	01	02	<1
SANTA FE	NA	86									12	.02	<1
WINSTON-SALEM	56	60	26	15	04	21			02	04	NA	0	0

*Data for Alum Rock and Yonkers are not currently available.

**Berkeley County operates a combined Reading/Math Lab. Special Education services are also included in this figure

***Harrison County also operates an unusually extensive summer school, which accounts for 31% of program expenditures

and National Survey data are comparable. It is interesting to note that generally Demonstration teachers make far greater use of objective-referenced tests in diagnosing learning needs than do National Survey teachers. Further, while the major portions of both teachers report assigning tasks on the basis of individual needs, fewer Demonstration teachers report assigning to small groups, while more report assigning to the whole class. Both groups appear to record students' progress on the average of one to four times a week.

In summary, the Demonstration and National Survey districts appear to have been comparable on a variety of program dimensions in 1975-76. A more detailed discussion of the Demonstration districts is presented in the sections which follow.

4.3 Activities and Services

In 1975-76, the Title I program in all 13 sites provided a range of services (see Table 4.2). However, priority was given to instructional efforts, principally reading and/or language arts. This area generally accounted for both the largest portion of program funds and the largest portion of children served. Mathematics instruction accounted for the second largest portion of funds; pre-kindergarten and kindergarten the third. Mathematics expenditures were usually less than half of reading expenditures, while the ratio of pre-kindergarten and kindergarten expenditures to total expenditures varied widely across districts, ranging from 0% to 47%. Finally, English as a Second Language (ESL) and bilingual instruction were infrequently offered. (Although detailed expenditure and participant data are not currently available for State programs, Site Descriptions verify that priorities were very much the same for those as for Title I.)*

With the exceptions of Houston and Santa Fe, districts generally expended less than 5% of program funds on support services. Two percent of funds or less were typically expended on Title I PAC and inservice activities. As a rule districts utilized regular LEA inservice together with the ongoing support of program and district coordinators and supervisors to provide staff development. In addition, staff development activities were initiated and implemented at the school level.** Districts also made extensive use of regular school and community resources to provide a variety of health, social, and psychological services. The tendency seemed to be to rely on Title I and State funds for such support only as a last resort, i.e., when the child could not be helped through some other

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*This general picture of instructional services is corroborated by principal descriptions of school-level compensatory services and activities. These data are presented and discussed in detail in Appendix E.

**Instructional staff development from the school perspective is discussed in detail in Section 4.7.1.

agency.* Finally, although few districts provided the Title I PAC with funds, PACs often assumed a number of responsibilities (see Section 4.7.2).

Title I and State services were extended to children in a range of grade spans. Tables 4.3 and 4.4 show instructional activities by grade span for each district. (Support services were available only to those children in the instructional program and therefore are not shown.) As these tables reveal, all grade levels (1-12) were served in some districts. However, across districts the major effort for both Title I and State programs was directed at grades 1-6. Three of the districts focused Title I efforts entirely on these grades. Two did so for State efforts. Finally, for those districts extending services into grades 7-12, the more detailed data presented in the Site Description report reveals that the largest portion of expenditures and children served were concentrated at the elementary level.

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*The general scope of support services from the school perspective is discussed in Appendix E.

TABLE 4.3

GRADE LEVEL COVERAGE OF TITLE I
INSTRUCTIONAL ACTIVITIES FOR THE 13 DEMONSTRATION SITES

(Data Source: Site Descriptions)

DISTRICT	MAJOR INSTRUCTIONAL ACTIVITIES*			
	READING	MATH	BILINGUAL/ ESL	INSTRUCTION FOR SPECIAL GROUPS
Adams County #12	1-12	1-9		
Alum Rock	1-8	1-8		
Berkeley County	1-6	1-6		
Boston	1-8	1-5	1-5	h.s. dropouts
Charlotte	2-6	4-6		1-12
Harrison County	1-6			
Houston	1-10	1-8		1-12
Mesa	1-12	1-12	5-8	
Newport	4-12			
Racine	1-9			ungraded
Santa Fe	1-8			
Winston-Salem	1-8	7-10		
Yonkers	1-6	2-5	1-6	1-5

*Pre-kindergarten and kindergarten are excluded since they are by definition limited to these grade spans.

TABLE 4.4

GRADE LEVEL COVERAGE OF STATE INSTRUCTIONAL ACTIVITIES FOR EIGHT DEMONSTRATION SITES*

(Data Source: Site Descriptions)

DISTRICT	MAJOR INSTRUCTIONAL ACTIVITIES**			
	READING	MATH	BILINGUAL/ ESL	SPECIAL GROUPS
Alum Rock	1-6	1-6		
Boston	1-8	1-6	1-6	10-12
Houston	1-12	1-12		
Mesa			1-4	
Newport	1-3			
Racine	1-6			
Santa Fe***	1-6	1-6	1-9	
Yonkers	1-6	1-6	6	

*Only 8 of the 13 districts had state-funded programs in 1975-76.

**Pre-kindergarten and kindergarten are excluded since they are by definition limited to these grade spans.

***This is a jointly funded federal, state, and local program.

4.4 Staffing and Staff Utilization: Title I and State Programs

Table 4.5 summarizes Site Description data on Title I staffing. As this table shows, 1975-76 Title I program activities were implemented by a variety of instructional and non-instructional staff. In general, both instructional specialists and paraprofessional aides were responsible for delivering instruction. The exceptions to this pattern were Berkeley County and Racine, both of which relied far more heavily on aides than on specialists. Although comprehensive staffing data are not currently available for State programs, site descriptions verify that the State staffing pattern was generally the same.

This Title I/State staffing pattern was confirmed by principals, who reported that specialists and aides provided Title I instruction in 80%-100% of the schools in all sites and State compensatory instruction in about 65%. In contrast, principals reported that classroom teachers provided Title I instruction in approximately 30% of schools and State instruction in approximately 55%. The exception to this pattern was Alum Rock, where principals reported that classroom teachers provided instruction in 100% of the schools, and specialists in 33%. Other districts where substantial portions of schools reported classroom teachers as providers of compensatory instruction were Berkeley County, Mesa, Newport, Santa Fe, and Yonkers for Title I, and the latter three sites plus Boston for State compensatory programs.*

As discussed in the Site Description Report, the typical organizational pattern was to place aides under the supervision of specialists, with each specialist overseeing several aides.** Since specialists were pivotal in the

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*See Tables E-31 through E-32, Appendix E.

**The exception to this pattern was Berkeley County, which typically placed Title I and other compensatory aides under the supervision of the regular classroom teacher.

TABLE 4.5

PERCENTAGE OF TITLE I STAFF EMPLOYED (BY FTE)*
IN VARIOUS CATEGORIES, 1975-76

(Data Source: Site Descriptions)

TYPE OF STAFF	DISTRICT **										
	ADAMS COUNTY	BERKELEY COUNTY	BOSTON	CHARLOTTE	HARRISON COUNTY	HOUSTON	MESA***	NEWPORT	RACINE	SANTA FE	WINSTON-SALEM**
	%	%	%	%	%	%	%	%	%	%	%
INSTRUCTIONAL:											
• Teachers/Specialists	38	13	42	51	40	44	33	65	6	37	38
• Aides	61	81	47	45	52	38	58	25	87	41	54
ADMINISTRATIVE: (Includes administrators, supervisors, secretarial and clerical)	1	2	7	1	2	10▲	7	8	4	4	3
AUXILIARY SERVICES:											
• Professional (Nurse, Social Worker, etc.)		3	1	1	2	<1			1	13	1
• Paraprofessional (Aides)			1			<1			1	2	
N TOTAL FTE STAFF	15.5	41.8	805.1	252.9	48	656.8	88.5	19.7	88.9	41	173.7

*Full-time equivalent.

**Data for Alum Rock and Yonkers are not currently available.

***As discussed in the Site Description report, this district makes extensive use of regular district staff to support Title I. These staff are included in FTE figures.

▲Does not include district administrative personnel who support Title I.

delivery of compensatory instruction, it is interesting to look more closely at their professional qualifications and their utilization of time.

Table 4.6 displays education, experience, and employment status for both specialists and classroom teachers. (No distinction is made between Title I and State staff.) As this table indicates, specialists and classroom teachers across all sites were generally equally experienced. However, specialists tended to have a higher level of education than did regular classroom teachers. Smaller portions of specialists than teachers reported educational levels of Bachelors' degrees or less, and larger portions reported Masters' degrees or better. In terms of employment status, more specialists appeared to be non-tenured, even though both specialists and teachers were full-time employees.

A closer look at Table 4.6 reveals substantial site variation in differences between specialists' and teachers' years of experience and educational level. It would appear that the meaning of the title "specialist" varied across sites. For example, in four sites--Alum Rock, Newport, Adams County #12, and Yonkers--specialists had about 3.5 more years experience and considerably higher levels of education. In addition, Santa Fe specialists, while having about two years less experience than teachers, also had substantially higher educational levels. In these sites, the position of specialist appears to have been one of leadership based on training and/or experience. In the remaining sites, specialists had about three years less experience than teachers, and either approximately the same or only slightly higher educational levels. In these sites the position of specialist appears to have been a function of the population taught.

Across the 13 Demonstration districts, both Title I and State specialists spent the major portion (about 50%)

TABLE 4.6

QUALIFICATIONS OF INSTRUCTIONAL SPECIALISTS
AND REGULAR CLASSROOM TEACHERS

(Data Source: Teacher Background Form)

DISTRICT	SPECIALISTS					CLASSROOM TEACHERS				
	YEARS OF TEACHING EXPERIENCE	LEVEL OF EDUCATION		EMPLOYMENT STATUS		YEARS OF TEACHING EXPERIENCE	LEVEL OF EDUCATION		EMPLOYMENT STATUS	
	$\bar{X}$	B.A. OR LESS	M.A. OR MORE	FULL-TIME TENURED	FULL-TIME NON-TENURED	$\bar{X}$	B.A. OR LESS	M.A. OR MORE	FULL-TIME TENURED	FULL-TIME NON-TENURED
ADAMS COUNTY #12	12.1	0.0	50.0	62.5	37.5	9.5	3.2	14.5	69.4	27.4
ALUM ROCK	17.8	0.0	81.8	100.0	0.0	13.3	7.2	20.3	84.5	5.6
BERKELEY COUNTY	7.6	28.6	28.6	57.1	42.9	11.0	18.2	16.4	74.1	22.2
BOSTON	10.7	14.5	55.9	86.2	3.9	10.6	13.0	48.7	80.9	4.9
CHARLOTTE	10.8	27.3	26.6	44.4	50.8	12.8	41.4	13.2	80.5	18.3
HARRISON COUNTY	10.6	5.3	36.9	63.2	36.8	8.9	21.6	20.3	70.3	29.7
HOUSTON	11.0	25.8	42.3	58.3	30.4	13.6	33.9	31.6	83.4	14.7
MESA	10.0	0.0	78.5	100.0	0.0	13.3	1.1	60.9	83.9	14.9
NEWPORT	15.0	0.0	63.7	81.8	18.2	10.6	0.0	20.0	80.0	20.0
RACINE	9.1	5.6	27.8	62.5	37.5	11.5	18.8	15.2	79.5	16.1
SANTA-FE	11.6	0.0	100.0	40.0	60.0	13.9	6.9	27.8	81.9	16.7
WINSTON-SALEM	14.4	7.4	44.4	70.4	29.6	13.7	40.6	22.8	85.7	10.3
YONKERS	13.7	0.0	93.7	100.0	0.0	10.5	8.6	58.5	87.1	11.4
RANGE	7.6-17.8	0.0-28.6	26.6-100.0	40.0-100.0	0.0-60.0	8.9-17.0	0.0-45.0	13.2-60.9	69.4-90.0	4.9-27.4
MEDIAN	10.8	5.3	50.0	62.5	36.8	12.8	18.2	20.3	80.9	16.1

of their time on direct instruction.* Far smaller portions of time were spent on such tasks as diagnosing and prescribing instruction, inservice activities (i.e., designing training activities and participating in training sessions), meeting with parents, travel, and preparation and record keeping. Of these latter activities, preparation and record keeping stands out as accounting for larger portions of specialist time than any of the other four.

While this pattern of specialist time utilization was typical of the Demonstration districts, there was some site variation. Principally, Racine stands out as a site where Title I language arts specialists spent a considerably smaller proportion of time in direct instruction, and a substantially greater proportion of time diagnosing and prescribing instruction and participating in various inservice and traveling activities. Racine and Santa Fe specialists also spent a slightly greater proportion of time traveling. Finally, Title I language arts specialists in Racine, Santa Fe, and Yonkers spent sizeable portions of time in inservice activities, i.e., designing and participating in training sessions.

*Both summary and by-district data on specialists' utilization of time are presented in Tables E-33 through E-36, Appendix E.

4.5 Instructional Operations: Title I and State Programs

There are a number of interesting variations across sites in the way direct instruction was delivered in 1975-76, including variations in location (type of setting for instruction), size of student class, amount of instruction per day, the proportion of the school year for which a student was enrolled in compensatory education programs, and in the degree and style of individualization of instruction. Discussion of individualization is reserved for section 4.6; the remaining topics are discussed here for both Title I and State compensatory education programs.

Location of Instruction

Across the 13 Demonstration districts, students typically received compensatory instruction outside their regular classrooms, but in the same building where they normally attended school. However, in Alum Rock virtually all compensatory instruction was delivered in the regular school and in the regular classroom. Other districts with significant portions of compensatory instruction in the regular classroom were Berkeley County, Mesa, and Yonkers for Title I and Houston, Santa Fe, and Yonkers for State efforts.*

In-school instruction outside the regular classroom was usually given in a room set aside for compensatory education. However, special rooms were not the only facilities typically used. In fact, only Newport made exclusive use of special rooms for Title I instruction, although several sites--Newport, Yonkers, and Santa Fe--did so for State instruction. This difference between State and Title I location patterns may be at least in part a function of the smaller size of the State programs. In other words, the more schools served by a program, the greater the probability of eventually encountering space problems which prohibit the establishment of special rooms or learning centers.

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*See Tables E-37 through E-39, Appendix E.

Class Size

Demonstration districts typically used two class sizes to deliver compensatory instruction, i.e., groups of two to five students and groups of six to ten. Districts typically used both class sizes. The major exception to this pattern was Alum Rock, which delivered instruction in classes of 26 or more. Further, Houston and Winston-Salem typically delivered Title I language arts instruction in classes of 11-15. State and Title I programs differed very little in class size; only in Santa Fe and Yonkers were students placed in small classes for one program and large classes for another.*

Minutes of Instruction Per Day

Across districts, students received Title I language arts instruction for about 38 minutes per day.** Principals report that math instruction in grades 1-3 was received for 40 minutes daily, while in grades 4-6 math was received for 37 minutes. The period of instruction per day for State language arts instruction was notably longer than that for Title I; State language arts instruction was around one hour. (Due to the small number of sites reporting, conclusions about State math cannot be drawn.)

For Title I programs, Alum Rock stands out as having an average length of language arts instruction three times that of the cross-site median and at least twice that of any other site. Interestingly, the minutes of math instruction per day in Alum Rock are much closer to that offered by the other districts. For State programs, Boston and Santa Fe stand out as having exceptionally lengthy language arts instruction in grades 1-3. Boston alone stands out for grades 4-6.

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*See Tables E-40 through E-42, Appendix E.

**See Tables E-43 and E-44. It should be noted that specialists' perceptions (see Table E-45) of minutes of instruction do not always agree with those of principals.

Duration of the Instructional Effort

Across all sites, the mean number of days per week that students received Title I language arts and math instruction was quite uniform--between four and five days per week. The only exceptions to this pattern were Harrison County and Yonkers, which provided Title I language arts 3.5 and 3.6 days per week, respectively. A similar pattern held for State compensatory instruction. Here only Mesa and Newport provided instruction for less than four days per week.*

Across sites, students typically remained in Title I and State programs for the entire school year. However, some schools in some sites--particularly Berkeley County, and Mesa--reported instructional duration of less than a year.**

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*See Tables E-43 and E-44, Appendix E.

**See Tables E-46 and E-47, Appendix E.

4.6 Individualization of Instruction

Table 4.7 summarizes across all 13 sites the responses of compensatory language arts specialists (from all funding sources) to a number of questions regarding individualization of instruction. The items reflect several of the dimensions utilized in the National Survey study discussed in Section 4.1, i.e.,:

- the use of diagnostic procedures--Item 1;
- the use of individually prescribed objectives, activities, and materials--Items 2, 3, and 4; and
- the use of evaluation and feedback activities--Items 5, 6, and 7.

Generally, language arts specialists in all 13 Demonstration districts reported individualizing instruction. Some caution must be exercised in interpreting these results, however, which may be due in part to the phrasing of the questions--often general in nature--and in part to positive response bias. Nevertheless, several findings are both notable and interesting.

Across sites, specialists reported using a number of measures to assess performance level at the beginning of the school year. Most commonly, both standardized achievement tests and informal testing procedures were employed. In addition, standardized diagnostic tests and tests keyed to instructional objectives were used by many.

Over 86% of the language arts specialists reported using specific performance objectives. Of these, two-thirds reported that they set objectives for individual students; twenty percent, for small groups; and 13% for the total group. Generally, objectives appear to have been based on both content and level of mastery. And, the majority of specialists in all sites reported having access to materials keyed to performance objectives.

TABLE 4.7

DIMENSIONS CHARACTERIZING INDIVIDUALIZATION OF INSTRUCTION IN COMPENSATORY EDUCATION LANGUAGE ARTS PROGRAMS, 1975-76

(Data Source: Table E-48, Appendix E)

Instructional Characteristic	Percent of CE Teachers Employing Characteristic	
	RANGE	MEDIAN
1. Measures used to assess performance level at beginning of instruction:		
Standardized achievement test scores	31.3 -100.0	84.6
Standardized diagnostic test scores	36.4 - 87.1	59.1
Scores on district-, school-, or program-developed tests keyed to instructional objectives	36.4 - 92.6	63.6
Scores on teaching staff-developed tests keyed to instructional objectives	27.9 - 81.8	52.2
Informal testing	55.6 -100.0	84.8
Previous year's grades	12.5 - 69.2	31.3
Student's age	7.7 - 43.8	22.7
2. Use of performance objectives:		
Specific performance objectives used	69.2 -100.0	86.4
Of those using specific objectives, goals are set for:		
Each child	20.0 -100.0	66.7
Small groups	0.0 - 66.7	19.6
Total group	0.0 - 45.2	13.3
Of those using specific objectives, objectives are based on:		
Content	0.0 - 57.1	9.1
Level of mastery	0.0 - 20.5	11.1
Both	42.9 -100.0	76.9
Of those using specific objectives, access to materials keyed to those objectives	64.0 -100.0	90.9
3. How are tasks assigned:		
To whole class	7.9 - 45.7	26.9
To small groups	17.8 - 45.7	25.4
To individual students	29.1 - 73.6	43.6
4. How materials are utilized:		
Same materials, same order, same rate	0.0 - 27.3	2.2
Same materials, same order, different rate	0.0 - 50.0	25.3
Same materials, different sequence	0.0 - 33.3	12.5
Different materials for different children	25.0 -100.0	48.2

TABLE 4.7 (cont'd)

DIMENSIONS CHARACTERIZING INDIVIDUALIZATION OF INSTRUCTION IN COMPENSATORY EDUCATION LANGUAGE ARTS PROGRAMS

Instructional Characteristic	Percent of CE Teachers Employing Characteristic	
	RANGE	MEDIAN
5. Measures used to assess students' progress during the year:		
Review homework/workbooks	0.0 - 25.6	0.0
Scores on objective referenced tests	43.2 -100.0	61.5
Class participation	0.0 - 55.6	18.5
Student self-evaluation	0.0 - 6.8	0.0
6. Methods of recording students' progress		
Folders	64.7 -100.0	90.9
Flow charts	9.1 - 43.8	23.5
Record forms provided with materials	37.1 -100.0	69.2
Computer tracking system	0.0 - 51.3	0.0
7. Frequency of recording students' progress		
5 times a week	0.0 - 61.5	16.0
1-4 times a week	12.5 - 55.2	42.9
1-3 times a month	0.0 - 69.2	25.8
Less than 1-3 times a month	0.0 - 68.8	6.8

Use of individual pacing and sequencing of materials was widespread, although not universal. Tasks were assigned most often on an individual basis, but small groups and whole class assignments were also made. Many language arts specialists reported using different materials with different children. Others were apt to assign the same materials but at differing rates for different students.

With respect to evaluation/feedback activities, the use of objective-referenced tests emerged as a frequent measure of assessing progress in Demonstration sites. Student folders were employed by nearly all language arts specialists to record progress. In addition, the records accompanying instructional materials were used by 70 percent. Finally, progress was typically recorded one to four times a week.

Districts varied in the measures used to diagnose performance at the beginning of the year, as well as in their prescriptive and evaluative activities. Some districts scored highly across a number of dimensions of individualization. Newport specialists, for example, all reported setting specific performance objectives for individuals and using different materials with different children. Newport also ranked high (second to Racine) in the proportion of specialists who reported individualizing learning tasks. Only in evaluation practices did Newport trail other sites. (For example, Newport specialists reported recording students' progress relatively infrequently.) Other sites reported less individualization of instruction generally. Typically, however, there was variability within, as well as across sites. It would appear that districts either define individualization differently or devote more attention to some dimensions of individualization than to others.*

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*See Table E-48, Appendix E.

Table 4.8 summarizes the across-site data for compensatory mathematics specialists in the seven sites where such programs existed, and where sufficient numbers of specialists reported data.* In general, the findings parallel those for language arts. It should be noted, however, that the median percentage of specialists reporting individualized instructional practices in mathematics is somewhat higher than the median for language arts.

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*By-site mathematics data are presented in Table E-49, Appendix E.

TABLE 4.8

DIMENSIONS CHARACTERIZING INDIVIDUALIZATION OF INSTRUCTION IN COMPENSATORY EDUCATION MATHEMATICS PROGRAMS

(Data Source: Table E-49, Appendix F)

Instructional Characteristic	Percent of CE Teachers Employing Characteristic	
	RANGE	MEDIAN
1. Measures used to assess performance level at beginning of instruction:		
Standardized achievement test scores	16.7 -100.0	97.3
Standardized diagnostic test scores	16.7 -100.0	66.7
Scores on district-, school-, or program-developed tests keyed to instructional objectives	0.0 -100.0	56.3
Scores on teaching staff-developed tests keyed to instructional objectives	0.0 - 83.3	75.0
Informal testing	37.8 -100.0	70.6
Previous year's grades	10.8 -100.0	75.0
Student's age	0.0 - 29.4	0.0
2. Use of performance objectives:		
Specific performance objectives used	25.0 -100.0	90.9
Of those using specitic objectives, goals are set for:		
Each child	14.3 -100.0	73.7
Small groups	0.0 - 71.4	9.4
Total group	0.0 - 46.2	8.1
Of those using specific objectives, objectives are based on:		
Content	0.0 - 7.7	0.0
Level of mastery	0.0 - 18.5	6.3
Both	73.8 -100.0	93.8
Of those using specific objectives, access to materials keyed to those objectives	81.1 -100.0	100.0
3. How are tasks assigned:		
To whole class	10.2 - 43.5	20.5
To small groups	15.0 - 40.0	26.3
To individual students	35.8 - 74.6	48.8
4. How materials are utilized:		
Same materials, same order, same rate	0.0 - 6.9	0.0
Same materials, same order, different rate	0.0 - 44.4	20.8
Same materials, different sequence	0.0 - 33.3	25.0
Different materials for different children	43.1 - 83.3	55.6

TABLE 4.8 (cont'd)

DIMENSIONS CHARACTERIZING INDIVIDUALIZATION OF INSTRUCTION IN COMPENSATORY EDUCATION MATHEMATICS PROGRAMS

Instructional Characteristic	Percent of CE Teachers Employing Characteristic	
	RANGE	MEDIAN
5. Measures used to assess students' progress during the year:		
Review homework/workbooks	0.0 - 71.4	9.7
Scores on objective referenced tests	28.6 -100.0	58.1
Class participation	0.0 - 40.0	7.1
Student self-evaluation	0.0 - 9.7	0.0
6. Methods of recording students' progress		
Folders	69.2 -100.0	100.0
Flow charts	26.6 -100.0	46.2
Record forms provided with materials	15.4 -100.0	54.4
Computer tracking system	0.0 - 10.1	0.0
7. Frequency of recording students' progress		
5 times a week	0.0 - 37.5	15.4
1-4 times a week	0.0 -100.0	50.0
1-3 times a month	0.0 - 62.5	21.4
Less than 1-3 times a month	0.0 - 35.7	5.0

4.7 Ancillary Components

4.7.1 Instructional Staff Development

As noted previously, the general approach to instructional staff development in the Demonstration districts was to provide special training and ongoing support without major expenditure of program funds. This was accomplished by the utilization of the regular district inservice program and the (often informal) definition of both regular and compensatory administrative, supervisory, and specialist roles to include staff development responsibilities. Since training was delivered at the school level, the most complete picture of staff development activities is provided by the school perspective, i.e., the Principal Questionnaire data.*

All districts indicated that at least some schools provided staff training sessions, i.e., special workshops, lectures or seminars in compensatory education.** From 16% to 100% of the schools across districts provided training. The mean percentage of sessions initiated by various types of personnel shows that in-school and district personnel were the most frequent initiators. Only in Adams County #12 and Boston were outsiders noticeably represented. In most districts, it is district personnel who were dominant as initiators; however, it is interesting to note that in three districts--Yonkers, Adams County #12, and Alum Rock--more sessions were initiated by in-school personnel than by district staff.

Because school-initiated training sessions are of particular interest, the following discussion deals only with workshops initiated at that level. Across districts, workshops and training sessions tended to be almost equally focused on instructional techniques and materials, special needs of the educationally disadvantaged, and planning and using various

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*Instructional staff development encompasses all compensatory programs, regardless of funding source.

**See Table E-50, Appendix E.

resources.* Districts which favored a particular category of staff training to some extent were: Berkeley, Charlotte, Harrison, and Winston-Salem, which focused on instruction related activities; Adams County #12 and Racine, whose primary concern was the needs of educationally disadvantaged students; and Santa Fe, where planning and the use of resources were primary concerns.

Workshops and training sessions were not the only means by which schools provided compensatory staff development. The most typical additional training activities included staff meetings and consultations by staff with specialists.** Newport ranks notably lower on both these items. Alum Rock and Santa Fe rank exceptionally high in meetings and consultations. Alum Rock and Santa Fe also provided relatively more college courses paid for fully or in part by the district. Finally, Santa Fe and Harrison sponsored staff exchange programs for its teachers.

4.7.2 Title I Parent Involvement

There are two aspects of Title I parental involvement. On the one hand, parents are involved in the Parent Advisory Councils (PACs) which, as a matter of regulation, must exist in every Title I school.*** On the other hand, parents are involved outside the PAC framework, functioning as paid aides or volunteers, planning for compensatory education, participating in parent training sessions, and working with school staff to define learning goals. The key question for both aspects is: to what degree were parents involved?

In 1975-76, school level Title I PACs operated by various sets of local regulations. Some included only parents

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*See Table E-51, Appendix E.

**See Table E-52, Appendix E.

***The focus of this chapter is on school level activities. Parent involvement in District PAC activities is discussed in Chapters 5 and 6.

of Title I children; some were open to all interested parents and community members; and some included Title I teachers and specialists. The frequency of PAC meetings varied across schools and across districts. Additionally, the level of attendance varied across districts but in no district averaged more than 15 parents.*

PACs were involved in a variety of activities, which generally included the following:

- planning compensatory education programs in the schools;
- evaluating compensatory education programs in the schools;
- determining the schools or children to be served by compensatory programs within schools;
- determining resource allocations;
- designing and conducting training sessions, seminars, and other activities for parents;
- working with school staff to define students' learning goals.

Principals estimated the overall amount of responsibility for school level PACs in the areas listed above. Santa Fe and Alum Rock exhibit a relatively greater amount of total PAC responsibility, and Boston, Houston, Newport, and Winston Salem relatively less. The other districts tend to show very similar amounts of total responsibility. There appears to be very little correlation between frequency of meetings and the overall amount of responsibility.

Principals also estimated parental involvement outside the PAC framework. Areas of parent activity investigated were:

- participation as paid aides or assistants in the classroom;

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*See Table E-53, Appendix E.

- participation as volunteers in the classroom;
- participation in meetings other than PAC meetings to plan or evaluate the compensatory education program(s) in the school;
- participation in parent training sessions;
- working with school staff to define learning goals.

Again, Alum Rock and Santa Fe rank well above the mean and display a relatively greater degree of parent involvement. The districts which rank relatively lower are Berkeley, Harrison and Newport.*

*See Table E-54, Appendix E.

5.0 COMMUNITY REACTION TO DEMONSTRATION POLICY OPTIONS

5.1 Introduction

The success of public school programs as well as programs initiated by other community-based public institutions, depends in part on the support of the local community. It is important, therefore, to consider community opinion in the analysis of the Title I Demonstration. Because Title I legislation mandates that parents be actively involved in educational decision making generally, and because Parent Advisory Council (PAC) approval of districts' Demonstration plans was specifically required by law, it is also important that we pay special attention to parental knowledge of and participation in such decision making.

This chapter, then, addresses the following questions:

- What are the Demonstration-related policy preferences of the relevant community members?
- What are the levels of involvement, intensity of communication, and general information prevalent among groups of parents?

The first question provides a benchmark for assessing the likelihood of educational interest groups supporting or opposing Demonstration options and changes. The second question provides a baseline for assessing the degree to which Demonstration changes enhance or impede the parent participation goals of Title I legislation.

5.2 Policy Option Preferences

All respondent groups, including principals, teachers, compensatory reading and math specialists, and parents, were administered identical items which elicited their opinions

about various policy options potentially available to the Demonstration districts. The items selected for analysis here address the following basic policy issues:

- Overall effectiveness of compensatory education programs;
- Support for poverty- or achievement-based techniques of selecting students for compensatory programs;
- Support for concentration or saturation of services across schools with varying numbers of eligible students; and
- Overall appropriateness of standardized achievement tests for assessing student performance.

Opinions about these four policy issues were measured using both individual and combined items. The items used to address each issue are presented in Appendix F.

Cross-site means for the constituent groups on the four relevant variables are presented in Table 5.1.* These results can be summarized as follows:

- There are no dramatic differences between any of the constituent groups on any of the policy options.
- All groups seem to assess the effectiveness of compensatory educational programs positively.
- All groups prefer student selection based on achievement to selection based on poverty.
- All groups are relatively neutral in their support for either of the school selection options (i.e., concentrating compensatory services in schools with the greatest need versus providing services in all schools having some need).
- Standardized achievement tests are considered appropriate measures of student performance

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*These mean values were obtained by averaging the means for the 13 sites and were computed from Appendix F, Tables F-1 to F-4.

TABLE 5.1

POLICY PREFERENCES FOR VARIOUS CONSTITUENT GROUPS
POTENTIALLY AFFECTED BY THE DEMONSTRATION*

POLICY ISSUE	PRINCIPALS		TEACHERS		COMPENSATORY SPECIALISTS	PARENTS		
	TI	NTI	TI	NTI		TI	NTI/TI SCHOOLS	NTI/NTI SCHOOLS
EFFECTIVENESS OF COMPENSATORY PROGRAMS**	3.4	3.0	3.1	3.1	3.4	3.4	3.3	3.3
POVERTY VS. ACHIEVEMENT BASED STUDENT SELECTION***	1.9	1.7	1.7	1.7	1.8	1.9	1.8	1.8
CONCENTRATED VS. SATURATED SCHOOL SELECTION***	2.4	2.1	2.4	2.2	2.4	2.2	2.2	2.2
STANDARDIZED ACHIEVEMENT TESTS AS MEASURES OF STUDENT PERFORMANCE**	2.6	2.6	2.2	2.3	2.3	2.7	2.6	2.6

*These summary results reflect the reactions of the various respondents across the 13 districts calculated by averaging individual site means for each group. By-site results and significance tests are presented in Appendix F, Tables F-1 to F-4.

**4 = Very effective; 3 = Moderately effective; 2 = Slightly effective; 1 = Ineffective.

***Values > 2.5 indicate support for poverty or concentrated selection. Values < 2.5 indicate support for achievement or saturated selection.

by principals and parents regardless of Title I status. Teachers and specialists, professionals more directly involved with instruction, show less support for the accuracy of standardized tests.

These summary results can be further specified by comparing the responses of the various constituent groups within each district, and by comparing the responses of each constituent group across districts. Looking at differences among constituent groups within each district shows that:

- When compared with their non-Title I counterparts, support for the effectiveness of compensatory programs is especially high for Title I principals in Boston, Charlotte, and Houston, and for Title I teachers in Charlotte and Winston-Salem. (See Appendix F, Table F-1.)
- Title I principals in Houston show more support for poverty-based student selection criteria than their non-Title I counterparts. Title I teachers in Alum Rock, Berkeley County, Mesa, and Racine tend to give more support to poverty-based student selection than non-Title I teachers in these sites. (See Appendix F, Table F-2.)
- Title I principals support concentration of compensatory services in schools with the greatest need to a significantly greater degree than non-Title I principals in Adams County #12, Harrison County, Houston, Mesa, and Santa Fe. With the exception of Mesa, the same is true for Title I teachers in these sites and in Alum Rock, Berkeley County, and Charlotte. (See Appendix F, Table F-3.)
- Title I teachers in Adams County #12, Boston, Santa Fe, and Yonkers, and Title I principals in Charlotte are less supportive of the use of standardized tests to measure student performance than their non-Title I counterparts. (See Appendix F, Table F-4.)

Looking at the responses of the various constituent groups across the 13 districts reveals little within-group variation for any policy preference. This implies that group policy preferences are relatively consistent across districts, and that preferences tend to reflect occupational and/or educational position rather than demographic or programmatic differences among districts.

The accurate interpretation of the poverty/achievement and concentration/saturation variables depends in part on the correlations between individual items which comprise each of these variables. These correlations are important both substantively and statistically. The degree to which correlations between opposing items (e.g., poverty versus achievement criteria) are negative may serve as an estimate of the degree to which respondents understand the issues and policy questions which have motivated the Demonstration study. The correlations are important statistically because the method of variable construction used to create the poverty/achievement and concentration/saturation variables depends on negative correlations between opposing items.

Table 5.2 presents the mean correlations* (Kendall's tau) between the items measuring the poverty/achievement and concentration/saturation variables for various constituent groups. These cross-site correlations can be summarized as follows:

- All the mean correlations for the poverty/achievement variable are in the expected direction. All groups see some opposition between poverty and achivement criteria for student selection, although the correlations are relatively small.
- With the exception of parents, the constituent groups also see some degree of conflict between concentrated and saturated school selection techniques. Parents see no necessary conflict between these opposing options.
- Principals see the greatest degree of conflict between proverty and achievement-based student selection.

These general results can also be further elaborated by examination of the site-specific results presented in Appendix F. These show that for parents there is wide variation among the site-level correlations for concentrated/saturated

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*These mean correlations were obtained by averaging the means for the 13 site-level correlations. Results for each site can be found in Appendix F, Table F-5.

TABLE 5.2

MEAN CORRELATIONS (TAUs) BETWEEN ITEMS COMPRISING TWO POLICY OPTIONS FOR VARIOUS CONSTITUENT GROUPS IN THE DEMONSTRATION DISTRICTS*

CONSTITUENT GROUP	POLICY OPTION**	
	POVERTY/ ACHIEVEMENT	CONCENTRATION/ SATURATION
PARENTS	-.16	.03
TEACHERS	-.22	-.21
SPECIALISTS	-.29	-.23
PRINCIPALS	-.32	-.20

*Means were calculated by averaging the individual site means across the 13 Demonstration districts.

**The wording of all four items can be found in Appendix F. All items are coded: 1 = Strongly disagree
2 = Disagree
3 = Agree
4 = Strongly agree

school selection. Correlations range between moderately large negative values (in Racine) and moderately large positive values (in Newport and Yonkers). Positive correlations probably indicate that parents in these sites are confused on the issue of school "selection."

It will be interesting to discover as the Demonstration proceeds whether the policy preferences and these correlations will change. If the issue of student and school selection becomes widely discussed and politicized, it is likely that all groups will show more marked preferences for or against various policy options. It is also likely that these correlations will increase as the issues are more clearly understood. Indeed, as the latter occurs, so may the former.

5.3 Parent Participation

Parent participation in both Title I and the Demonstration itself is the intent and requirement of Title I legislation. Because such participation can be affected by the Demonstration, in this section we examine baseline year data reported by parents. Included here is information on the following:

- involvement in local or city-wide PTAs;
- involvement in local or city-wide PACs;
- involvement in various school activities;
- knowledge of Title I programs; and
- community interest in the potential options for selection of students into compensatory programs.*

Parent participation analyses were performed for the three parent groups of interest: Title I parents, non-Title I parents in Title I schools, and non-Title I parents in non-Title I schools. Table 5.3 summarizes the cross-site results for these three groups. These results indicate that:

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*See Appendix D, Table D-11 for a complete description of these scales.

TABLE 5.3

MEANS FOR THREE PARENT GROUPS ON SCALES MEASURING PARENT INVOLVEMENT IN EDUCATIONAL ORGANIZATIONS AND SCHOOL ACTIVITIES, KNOWLEDGE OF TITLE I PROGRAMS AND AWARENESS OF TITLE I STUDENT SELECTION OPTIONS*

SCALE	TITLE I PARENTS	NON-TITLE I PARENTS IN TITLE I SCHOOLS	NON-TITLE I PARENTS IN NON-TITLE I SCHOOLS
PTA INVOLVEMENT	48.0	49.5	51.3
PAC INVOLVEMENT	48.2	45.8	45.5
SCHOOL INVOLVEMENT	51.0	50.6	51.4
AWARENESS OF STUDENT SELECTION OPTIONS	49.7	49.3	50.8
KNOWLEDGE OF TITLE I PROGRAMS	.60	.51	.48

*Means were calculated by averaging the individual site means for each group across the 13 Demonstration districts.

- Title I parents tend to be less involved with PTA activities than either of the other two parent groups. This probably is indicative of the limited time that Title I parents are able to devote to general educational organizations, given their involvement in Title I PACs. (See below.)
- Title I parents are more involved in PACs than either of the other two parent groups. This is not particularly surprising since PACs are devoted to the needs and concerns of this group, and since in many sites only Title I parents belong to PACs.
- There are virtually no differences among the parent groups in terms of their involvement with school activities and regular educational programs which may involve parents.
- There are virtually no differences among the groups in their awareness of options for selecting students for Title I programs within their community.
- Title I parents are more informed about Title I programs than either of the two types of non-Title I parents.

These general results can be amplified by the examination of the site-specific tables (Tables F-6 to F-10 in Appendix F) which show that:

- Involvement in PTAs is significantly lower for Title I than for non-Title I parents in Boston, Charlotte, Houston, and Yonkers.
- Charlotte and Yonkers (sites where Title I parents were less involved with PTAs) seem to have higher levels of PAC involvement by their Title I parents. Non-Title I parents in Alum Rock tend to participate in PACs as frequently as Title I parents.
- In only one site, Adams County #12, are there significant differences among parent groups in involvement with school activities. In this site, Title I parents are involved in school activities to a greater degree than either non-Title I parent group.
- Only two sites show significant differences among parent groups in their awareness of student selection options. Berkeley County's non-Title I parents in Title I schools have higher scale scores than either of the other

parent groups. In Yonkers, Title I parents are more apt to have heard discussions of the selection options than the other parent groups.

- Several sites show the expected pattern of results with Title I parents being the most informed about Title I programs, and non-Title I parents in non-Title I schools the least informed. Boston, Houston, and Winston-Salem all display this pattern. Other sites, however, display the opposite configuration in which Title I parents are the least informed. Berkeley County (where no PAC members were included in the sample), Mesa, and Yonkers are included here. In Alum Rock there are no large differences between parent groups.

Using the Appendix data to compare parent groups across districts reveals that:

- Parents in both North Carolina sites are more involved in PTA activities, regardless of Title I or non-Title I status, than are parents in other Demonstration sites.
- Santa Fe has a greater degree of non-Title I parent participation in PACs than other sites.
- Awareness of student selection options tends to be higher for all categories of Racine parents than for parents in other Demonstration sites. This may reflect more overall community interest in or visibility of the Demonstration and its issues in Racine.

As with the analysis of policy preferences, it is possible to speculate on the changes which may occur as the Demonstrations move into their second year. If the Demonstration commitment to parent involvement is realized, we expect increased differences between parent groups in levels of activity in PACs and, insofar as this results in trade-offs with other educational organizations, complementary differentials between parent groups in their involvement with PTAs. Levels of information about Title I programs should also increase in the sites where the Demonstration receives organizational or media coverage and dissemination.

6.0 THE CONTEXT OF THE DEMONSTRATION

6.1 Introduction

For purposes of discussion, the context of the Demonstration can be divided into two parts. The first, the setting, consists of those relatively unchangeable factors comprising the backdrop against which the Demonstration takes place. The second aspect of context consists of the Demonstration application and planning processes and procedures, which represent at least potentially manipulable elements. A grasp of these contextual aspects--setting and application/planning processes--will aid both in understanding change and in formulating guidelines for the implementation of policy changes.

Both the setting and application/planning processes are explored from state and local perspectives. This chapter first discusses setting, focusing on the following elements:

SEAs

- Bureaucratic Characteristics of the Title I Office
- Mechanisms for Regulating LEAs

LEAs

- Rationale for Applying
- Demographic Characteristics
- District Organizational Characteristics
- School Facilities and Principal Characteristics

The second portion of the chapter is devoted to the processes of application and planning. Discussed are:

- SEA Involvement in Application
- LEA Application Process

- LEA Planning Activities
- SEA Role in Planning

Taken together, these elements provided a comprehensive description of how the Demonstration was conceived and nurtured.

6.2 The State Education Agencies (SEAs)

Among the 11 SEAs involved in the Demonstration (two states contain two Demonstration districts each), the number of professional Title I staff varies greatly. This variation seems to depend primarily on the size of the state population and the number of compensatory programs for which the Title I Office is responsible. The division of responsibilities among professional staff shows very little variation. There is a predictable tendency for duties to be more formalized in offices with larger staffs.

All the Demonstration SEAs provide some technical assistance to local districts. This assistance is in the following areas:

- discussing local Title I programs with districts before the formal application process;
- helping districts to prepare their formal applications; and
- providing Title I-specific technical assistance to districts.

There is more variation among the 11 SEAs in their approach to supervision of LEAs. (Table 6.1) Certain SEAs, e.g., Colorado, New Mexico, and Wisconsin, provide little or no regulation over and above the federal regulations. The posture of such an SEA may be called remote in supervising its local Title I projects. Others, e.g., California, maintain an active supervisory role with LEAs through state regulations and the recommendation of standardized tests. Such standardization allows the SEA to compare test results across LEAs and adds a measure of accountability to the regulatory process.

TABLE 6.1

SEA SUPERVISION OF
LOCAL TITLE I PROGRAMS

(Data Source: Site Descriptions)

KEY
R+ = Rigid Requirements
R- = Non-Rigid Requirements
S = Suggestions
N = No Supervision

STATE	GUIDELINES OR REGULATIONS REGARDING:				
	CONCENTRATION OF FUNDS	PROGRAM OBJECTIVES OR DELIVERY	REDUCING CLASS SIZE: CHANGING PUPIL/ADULT RATIO	OTHER AREAS OF PROGRAM	GRADE LEVEL EVALUATION TESTS
ARIZONA	N	R+	N	R-	S
CALIFORNIA	R+	R+	R-	R-	R-
COLORADO	N	N	N	N	N
MASSACHUSETTS	N	N	N	N	S
NEW MEXICO	N	N	N	N	N
NEW YORK	N	R+	R+	S	N
NORTH CAROLINA	N	N	N	N	N
RHODE ISLAND	N	N	N	N	R+
TEXAS	N.A.*	N.A.	N.A.	N.A.	N.A.
WEST VIRGINIA	R+	N	N	N	N
WISCONSIN	N	N	N	N	N

* Data not currently available.

That is, cross-district comparisons allow judgments to be made regarding "better" or "more effective" programs. This, in turn, may have affected the process by which some SEAs selected districts to apply for the Demonstration (as discussed in Section 6.4.1).

Finally, certain SEAs vary in their approach to the supervisory process. New York, for example, is involved in program regulation, but not in requiring standard evaluation tests. Rhode Island remains uninvolved in program regulation but is involved in evaluation.

6.3 The Local Education Agencies (LEAs)

6.3.1 LEA Rationale for Application

As shown by Table 6.2, LEA applications to NIE indicate that participation in the Demonstration was in most cases motivated by a variety of rationales which tended to be interrelated and even overlapping. Across districts, six motivations were repeatedly expressed. In order of frequency, these are:

- desire to serve both schools and students on the basis of educational disadvantagement;
- desire to continue service to Title I-type pupils who are relocated by desegregation;
- desire to eliminate the distributional inequities caused by the lack of reliability and/or validity of available poverty indices;
- desire to eliminate the "stigma" of Title I as a special racial or income group program;
- desire to use "more reasonable" (than poverty) achievement criteria; and
- desire to make programmatic changes that increase the efficiency of institutional delivery.

The first two concerns--the desire to serve both schools and students on the basis of educational disadvantagement and the desire to continue service to Title I-type pupils relocated by desegregation--were each expressed by six districts, three of which offered both rationales. It is interesting to

TABLE 6.2

LEA RATIONALES FOR INVOLVEMENT IN THE DEMONSTRATION

(DATA SOURCE: SITE DESCRIPTIONS)

SCHOOL ELIGIBILITY POLICY CHOSEN FOR THE DEMONSTRATION	DISTRICT	DESIRE TO SERVE STUDENTS ON THE BASIS OF EDUCATIONAL DISADVANTAGEMENT	DESIRE TO CONTINUE SERVICE TO TITLE I TYPE PUPILS WHO ARE RELOCATED BY DESEGREGATION	DESIRE TO ELIMINATE INEQUITIES CAUSED BY LACK OF RELIABILITY/VALIDITY OF AVAILABLE POVERTY INDICES	DESIRE TO ELIMINATE "STIGMA" OF TITLE I AS SPECIAL-GROUP PROGRAM	DESIRE TO USE "MORE REASONABLE (THAN POVERTY)" ACHIEVEMENT CRITERIA	DESIRE TO MAKE PROGRAMATIC CHANGES THAT INCREASE THE EFFICIENCY OF INSTRUCTIONAL DELIVERY	DISTRICT-SPECIFIC RATIONALES
DIRECT LEA TO STUDENT ALLOCATION (DIRECT ALLOCATION)	ADAMS COUNTY #12	X						Some students must wait until junior high before receiving services. By this time their educational problems are more severe. Student population is fairly mobile. As students move around within the district, they lose services.
	ALUM ROCK							
	HARRISON COUNTY	X						
	MESA	X		X	X	X		Use of achievement measures helps identify and select the most needy children in the district; thus, entering achievement levels of Title I pupils will be lower than under poverty criteria.
	NEWPORT		X *		X			Long-time interest in modifying criteria to allow service to focus on children with "capacity-achievement gaps."
	RACINE		X					
	SANTA FE	X					X	

* Emerged as a key factor in Newport's implementation plan, but was not central to Newport's initial interest in participation.

(continues)

TABLE 6.2 (concluded)

LEA RATIONALES FOR INVOLVEMENT IN THE DEMONSTRATION

(DATA SOURCE: SITE DESCRIPTIONS)

SCHOOL ELIGIBILITY POLICY CHOSEN FOR THE DEMONSTRATION	DISTRICT	DESIRE TO SERVE EDUCATIONALLY DISADVANTAGED IN NON-POVERTY SCHOOLS	DESIRE TO CONTINUE SERVICE TO TITLE I TYPE PUPILS WHO ARE RELOCATED BY DE-SEGREGATION	DESIRE TO ELIMINATE INEQUITIES CAUSED BY LACK OF RELIABILITY/ VALIDITY OF AVAILABLE POVERTY INDICES	DESIRE TO ELIMINATE "STIGMA" OF TITLE I AS SPECIAL-GROUP PROGRAM	DESIRE TO USE "MORE REASONABLE (THAN POVERTY)" ACHIEVEMENT CRITERIA	DESIRE TO MAKE PROGRAMMATIC CHANGES THAT INCREASE THE EFFICIENCY OF INSTRUCTIONAL DELIVERY	DISTRICT-SPECIFIC RATIONALES
SCHOOL ELIGIBILITY BASED ON ACHIEVEMENT TESTS	CHARLOTTE	X	X		X			Use of achievement rather than poverty as criteria for school eligibility increases the stability and continuity of Title I (i.e., increases the stability of the target school and student population.)
	WINSTON-SALEM		X	X	X	X		Use of achievement criteria to allocate resources permits greater local control.
SCHOOL ELIGIBILITY BASED ON POVERTY PLUS ACHIEVEMENT	BOSTON	X	X	X				
	HOUSTON		X			X		
SCHOOL ELIGIBILITY BASED ON POVERTY	BERKELEY COUNTY			X			X	
	YONKERS						X	

note that 10 of the 13 sites offered one or both of these rationales for participation. (Berkeley County, Alum Rock, and Yonkers did not raise these issues.)

The first of these two issues was raised by Adams County #12, Boston, Charlotte, Harrison County, Mesa, and Santa Fe. The essence of this concern is best expressed by Santa Fe, which points out that educational deprivation "does not respect" family income, family residence, or school attendance boundaries. Thus, identifying children as eligible to receive Title I services on the basis of "accidents of residence and/or income" is not adequately responsive to educational needs. It is important to note that this argument implies a desire to see a fundamental change in two aspects of current regulations: use of poverty to determine school eligibility for Title I and concentration of services in a limited number of schools.

The second of these issues was initially raised by five of the six LEAs that have desegregated since 1970. The sixth, Newport, did not express this concern in its application. However, during the planning year, the problem became of paramount concern to Newport and was the determining factor in its decision to implement the Direct Allocation option. As discussed in the Site Descriptions, these six districts had desegregated under a variety of circumstances and plans. Yet, the net impact on Title I was similar in all six sites. Disadvantaged students, who prior to desegregation were concentrated in a small number of inner-city, high-poverty schools, were scattered throughout the system. Many were placed in schools where the greater proportion of pupils were middle and high income. Generally, these schools could not meet eligibility criteria as specified in the Title I regulations. Hence, the transferred students lost services that they needed and probably would have received had they remained concentrated in the inner-city schools.

It is important to distinguish this concern for continuing services from the issue of serving on the basis of

educational disadvantagement. While serving on the basis of educational disadvantagement implies a desire to see a shift in the way in which Title I schools are determined eligible, the issue of continuing services does not. The essence of the desegregation concern is that Title I-type children, i.e., educationally disadvantaged pupils who attend schools with above average concentrations of poverty, are deprived of their "rightful" services when relocated by desegregation. In sum, the basic problem is the need to follow the Title I child wherever s/he goes under desegregation.

The third and fourth rationales--the desire to eliminate the distributional inequities caused by the lack of reliability and/or validity of available poverty indices, and the desire to eliminate the "stigma" of Title I as a special racial or income group program--were offered by four and five LEAs respectively, three of which had also raised the first two concerns. In sum, seven of the 13 sites offered one or both of these rationales.

The third rationale raised by Berkeley, Boston, Mesa, and Winston-Salem. These LEAs expressed several criticisms of the currently available poverty indices (AFDC, U.S. Census, free/reduced lunch data). Berkeley reports "major discrepancies" between AFDC survey data and actual population patterns, and cites serious problems with locating (by school) AFDC children whose surname differs from that of their parents. Boston points out that, because of the high cost of living in the area, nationally accepted definitions of poverty, whether determined from the 1970 Census or yearly AFDC surveys, are discriminatory. Mesa, a politically conservative district dominated by the religious and moral tenets of a large Mormon population, notes that many families who qualify for AFDC and/or free lunch assistance do not apply for this aid. Mesa also points out that 1970 Census data is quickly outmoded. Finally, Winston-Salem emphasizes that poverty measures are unreliable, tending to become outdated as public assistance rolls fluctuate and populations shift with urban development.

The fourth concern was expressed by Charlotte, Newport, Mesa, Winston-Salem, and Yonkers. Both Mesa and Winston-Salem argued that a change in selection criteria that permits deconcentration, particularly at the school level, will increase the visibility of the Title I program and thereby promote community acceptance and support. Newport notes that, under poverty criteria, Title I is seen as a "poverty program", thus accruing a social stigma displeasing to both parents and school administrators. Charlotte, a conservative southern district which underwent (and resisted) court-ordered desegregation in 1971, explains that federal programs in general are not warmly received. This is particularly the case for Title I, which is seen as being for one ethnic group, i.e., Blacks. Charlotte staff point out that in 1975-76, over 75% of the projected Title I participants were indeed Black, and reason that if poverty criteria were removed, Title I services might be more evenly distributed across all ethnic groups.

The fifth and sixth rationales--the desire to use the "more reasonable" achievement criteria and the desire to make programmatic changes that increase the efficiency of instructional delivery--were each proposed by three sites. There was no site duplication of these two rationales.

The fifth rationale was used by Houston, Mesa, and Winston-Salem, each of which also raised one of the first set of issues and two of which (Mesa and Winston-Salem) raised both of the second set. Both Houston and Winston-Salem make the general argument that achievement criteria are more rational than are poverty criteria in determining educational need. Winston-Salem also states that the criterion for school selection should be the same as that for student selection (i.e., achievement). Mesa is concerned with accountability, pointing out that achievement measures can be used not only to determine eligibility, but also to monitor and evaluate progress.

The sixth concern was raised by Berkeley County, Santa Fe, and Yonkers. Berkeley saw in the Demonstration the

opportunity to substantially improve the management and delivery of Title I services through the adoption of an individualized, diagnostic-prescriptive approach to instruction. The district anticipated a nearly 100% increase in the number of students served by this new system. Santa Fe initially anticipated an opportunity to deconcentrate dramatically at both school and student levels. The district proposed reducing the Title I per-pupil expenditure and tripling the number of children served. (During the planning year, Santa Fe parents objected to what they thought might be a watered-down program. Thus, in the final implementation proposal, deconcentration was cut back substantially to insure that schools participating in 1975-76 did not lose any of their resources in 1976-77.) Finally, Yonkers sought to redesign the total school curriculum in at least some Title I schools. This redesign involved implementation of a diagnostic-prescriptive reading curriculum for Title I students and effective coordination of this curriculum with regular instruction. The district anticipated that this new system would enable substantially more students within each affected school to be served more effectively.

Although these fifth and sixth rationales were offered by six of the 13 districts, they do not in fact appear to be of major importance. Districts offering the fifth also raised other, more specified issues. This leads to the speculation that this fifth rationale is essentially (with the exception of Mesa's accountability point) a generic reiteration of the more specified statements. Further, the sixth appears to be primarily an extension of a more fundamental rationale into the operational realm. For example, Santa Fe states a desire to serve educationally disadvantaged students in non-poverty schools. Increasing the efficiency of instructional delivery may be viewed as a method of operationalizing this desire, given limited funds. While Berkeley County does not state in its application the desire to serve students on the basis of educational disadvantagement, site visit interviews revealed

that this was indeed a fundamental motivation for participation. The picture in Berkeley County is, however, more ambiguous than that in Santa Fe. The district did indeed seek to increase the efficiency of instructional delivery per se in order to serve more students in each Title I school. Further, Berkeley's initial erroneous perception that participation would mean additional Title I funds was an important motivating factor. Nevertheless, Site Description interviews indicate that Berkeley County was at least sensitive to the expansion possibilities offered by an increase in the efficiency of instructional operations.

In addition to the six cross-district rationales discussed above, five LEAs--Charlotte, Mesa, Newport, Winston-Salem, and Adams County #12--offered district-specific arguments. Perhaps the most interesting and potentially generalizable of these is the issue of student mobility raised by Adams County #12. This district points out that its Title I-type student population is fairly mobile within the district. As pupils move from school to school during the school year, they lose and gain services, depending on which school they attend. Although this particular concern was not stated in the application by any of the other twelve districts, it warrants some attention. (It should be noted that Charlotte's concern with the stability and continuity of Title I may be at least in part reflective of this mobility issue.) It may be that within urban areas in general Title I student populations tend to be mobile, thus creating continuity problems under poverty criteria. Further, this mobility issue parallels that raised by desegregation, and this implies additional LEA interest in follow-the-child flexibility of regulations.

In conclusion, it appears that districts have four major desires that are perceived as being incompatible with existing regulations. These are:

- the desire to serve schools and students on the basis of educational disadvantagement;

- the desire to follow the Title I child as s/he relocates (whether because of desegregation or mobility patterns);
- the desire to eliminate the distributional inequities that stem from the inadequacies of current poverty criteria; and,
- the desire to eliminate the "stigma" of Title I as a poverty or special racial or ethnic group program.

By and large, it is these reasons that districts offer for their participation in the Demonstration.

6.3.2 Demographic Characteristics

Table 6.3. displays an overview of each district for several demographic variables of interest. Column one is a description of the metropolitan context of each district. The remaining columns examine economic and ethnic characteristics which can be taken together to give either a profile of any one district or a composite of all districts.

The wide spectrum of school districts involved in the Demonstration is clearly illustrated by the number of pupils in attendance areas, which ranges from just over 6,000 in Newport to 213,379 in Houston. It is also interesting to note the wide district variation in non-federal per-pupil expenditures, which range from $670 in Harrison County to $2,280 in Yonkers.

The Demonstration districts are not a random sample of LEAs. Rather, they are a systematically selected group, biased in part because of the voluntary nature of their participation, and in part because of the approval process employed by the SEAs and by NIE to insure the feasibility and policy relevance of their plans. Given this selection process, the question of representativeness immediately arises. The best available assessment of this issue is obtained by comparing the demographic characteristics of Demonstration districts with those of the national representative sample of approximately 100 Title I districts examined by the National Survey.

TABLE 6.3

DEMOGRAPHIC PROFILE OF DEMONSTRATION DISTRICTS

(Data Sources: Site Descriptions, Census Report)

DISTRICT	DESCRIPTOR	TOTAL NUMBER OF PUPILS IN ATTENDANCE AREA	TITLE I PER PUPIL EXPENDITURES IN DOLLARS	NON-FEDERAL PER PUPIL EXPENDITURES IN DOLLARS	PERCENTAGE MINORITY IN POPULATION WITHIN DISTRICT	PERCENTAGE OF FAMILIES WITH INCOMES BELOW POVERTY LEVEL	PERCENTAGE OF POPULATION WHOSE FIRST LANGUAGE IS NOT ENGLISH	NUMBER OF CHILDREN IN FAMILIES RECEIVING AFDC
ADAMS COUNTY #12	Suburban area not including central city	18,302	195	1,070	11.8	5.4	13.6	65
ALUM ROCK	Part of the central city of a metropolitan area	15,079	194	1,201	N/A	10.0	42.6	685
BERKELEY COUNTY	Rural county on the fringe of a metropolitan growth area	9,891	388	811	4.1	11.9	1.7	N/A
BOSTON	Central city of metropolitan area	120,358	530	1,300	N/A	11.7	22.6	19,255
CHARLOTTE	Central city plus suburban county of metropolitan area	77,183	376	1,296	24.1	9.4	2.8	5
HARRISON COUNTY	Rural county	16,705	260	670	2.0	13.2	6.8	N/A
HOUSTON	Central city of metropolitan area	213,379	266	887	37.8	11.3	17.7	N/A
MESA	Central city of metropolitan area	28,252	86	1,345	N/A	7.5	16.8	N/A
NEWPORT	Small city	6,218	510	1,844	4.0	13.7	16.5	167
RACINE	Central city plus suburban county of metropolitan area	35,267	755	1,351	19.5	5.7	22.0	1,869
SANTA FE	Central city of metropolitan area	13,704	240	893	65.3	17.8	57.9	N/A
WINSTON-SALEM	Central city plus suburban county of metropolitan area	44,635	326	1,162	22.5	11.0	2.0	N/A
YONKERS	Large secondary city in a metropolitan area	38,722	456	2,280	N/A	5.6	34.2	2,320

Table 6.4 is a cross-classification of the regional and enrollment strata from which the National Survey sample districts were selected. Located in the appropriate cells are the 13 Demonstration districts. As can be seen from this table, all four geographic regions are represented in the sample of Demonstration districts. This reflects legislative intent and the purposeful selection of districts by NIE.

On the other hand, all of the Demonstration districts fall within the middle and largest of the enrollment strata; none is in the smallest stratum. This imbalance probably reflects at least some of the following elements:

- Allocation policies are especially complex in large sites with several schools. Concentration decisions may be simpler in districts with three to four schools among which to distribute funds.

- In smaller sites, there are not as likely to be poverty pockets; poor children may be evenly distributed throughout the district and districts may use the "no wide variance provision" of the Title I regulations to serve all schools under present regulation.*

- Small districts generally do not have the staff or technical expertise available to respond to an RFP such as that which led to the Demonstration or to participate in program design.

While the generalizability of the results appears to be restricted by the limitation of district selection to two enrollment strata, the Demonstration districts probably do represent the group of districts chafing most under present

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*According to the rule set by 45 C.F.R. 116.17(d): "In certain cases, the whole of a school district may be regarded as an area having a high concentration of...children (of low income families) and be approved as a project area..." Thus if an LEA can establish to the satisfaction of its SEA that there are "no wide variances," all attendance areas of the school district become eligible.

TABLE 6.4

DEMONSTRATION DISTRICTS CLASSIFIED
BY REGION AND ENROLLMENT STRATA

ENROLLMENT	NORTHEAST	SOUTH	NORTH CENTRAL	WEST
Lowest third <4,359 students				
Middle third 4,359-17,628 students	Newport, R.I.	Berkeley County, W. Va. Harrison County, W. Va.		Santa Fe, N. Mex.
Highest third >17,628 students	Yonkers, N.Y. Boston, Mass.	Houston, Tex. Winston-Salem, N.C. Charlotte, N.C.	Racine, Wisc.	Adams County, Colorado Mesa, Arizona Alum Rock, California

regulations. This becomes even more likely when it is noted that five of the largest and one of the middle strata Demonstration districts have undergone desegregation and consequent redistribution of students since 1970. The findings thus become highly relevant in terms of the overall purpose of the Demonstration project and in terms of policy decisions.

Demographic comparisons between Demonstration and National Survey districts are not limited to geographic location and enrollment strata. Table 6.5 is a summary presentation of the overall comparability of the Demonstration and the National Survey districts on a variety of other variables selected from 1970 Census Fourth Court School District Data.

For purposes of this summary comparison, the discrepancy score statistic has been used to measure the difference between each of the Demonstration district's distribution of scores and the overall National Survey distribution of scores.* A cut-off value of .15 has been chosen to determine whether a district's discrepancy score suggests a substantially different distribution between the district in question and the Survey sample. The non-random nature of the districts makes it impossible to tell how large a discrepancy score must be before it may be considered substantitively important. This particular

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*The discrepancy score is a weighted sum of squares of the difference between each school district proportion of each category and the mean National Survey proportions. Specifically,

$$\text{Discrepancy Score} = \sum^{k} \frac{(P_o - P_e)^2}{P_e}$$

where P_o is the proportion for the Demonstration project
where P_e is the proportions for National Survey districts
where k is the number of categories of each variable

The discrepancy score is zero when the set of proportions for a Demonstration district is the same as the set of mean proportions for the Survey districts. The magnitude of the scores increases as the Demonstration proportions become dissimilar from the National Survey mean proportions. We have utilized this proportional based measure in place of the more conventional X^2 because this discrepancy score effectively controls for district size.

TABLE 6.5

DEMONSTRATION DISTRICTS WITH DISCREPANCY SCORES $\geq .15$
ON EACH OF THE DEMOGRAPHIC VARIABLES OF INTEREST BY SCHOOL DISTRICT

VARIABLE	Adams Co. #12	Alum Rock	Berkeley Co.	Boston	Charlotte	Harrison Co.	Houston	Mesa	Newport	Racine	Santa Fe	Winston-Salem	Yonkers	Total Number of Discrepancy Scores $\geq .15$
Housing Unit Relocation	X													1
Birth Place of District Resident	X							X	X					3
Family Type				X										1
Family Types of Population Under 18 Years of Age														0
Population 3 Years & Over By School Type				X									X	2
Enrollment By School Type & Grade Level				X	X					X		X	X	5
Adult Education Completed	X													1
Occupational Distribution									X		X			2
Adult Labor Force By Age									X					1
Adult Labor Force By Sex														0
Adult Unemployment By Sex														0
Foreign Birthplace														0
Language Usage		X									X		X	3
Spanish Descent & Heritage*														-
Family Income													X	1
Poverty Ratio													X	1
Families By Poverty Level & Children's Age														0
Poverty Income Sources*														-
Age Distribution														0
Sex Distribution														0
Total Number of Discrepancy Scores $\geq .15$	3	1	0	3	1	0	0	1	3	1	2	1	3	21

*No Discrepancy Score Analysis possible

cut-off point has been selected because it seems to separate the outliers from the remaining Demonstration districts. Table 6.5 summarizes the results of the discrepancy analysis when the .15 cut-off value is applied and presents, for each variable in the analysis, the districts which meet or exceed this discrepancy value.

This table can be interpreted from a variety of perspectives. First of all, each cluster of variables can be examined to see whether Demonstration districts tend to differ from the National Survey districts on that group of variables. For example, Boston and Yonkers deviate substantially from the Survey sample on two out of three school-related variables. This suggests that these two districts have something in common which differentiates them from the national sample of districts, in this case the large proportions of persons enrolled in parochial schools. Yonkers tends to differ from the National Survey sample with respect to measures of income. Newport also appears to differ from the Survey sample on two occupational structure variables. Newport's labor force is young in comparison to the Survey sample and is characterized by relatively large proportions of both professional and service workers.

Interpretation of the table can also proceed from the perspective of individual variables instead of groups of variables. Five Demonstration districts differ markedly from the National Survey sample on the variable labelled "enrollment by school type by grade level." Although the sheer number of categories for this variable may have contributed to the relatively high discrepancy scores on this measure, there are differences which are worthy of mention. Boston, Racine, and Yonkers have relatively greater proportions of persons enrolled in non-public schools, whereas Charlotte and Winston-Salem have relatively smaller proportions enrolled in such schools, especially at the elementary and high school levels.

There are two other variables which have three deviant Demonstration districts each. Adams County #12, Newport, and Mesa all have relatively large percents of persons who were not born in their state of residence but in another state. Alum Rock, Santa Fe, and Yonkers are also outliers on the language usage variable. All three districts have relatively large proportions of non-English-speaking persons, with Alum Rock and Santa Fe being the most deviant in this respect.

Finally, the summary table can be examined from the perspective of the individual Demonstration districts. Yonkers, for example, has discrepancy scores above the cut-off value on five out of the possible 18 variables. Boston, Adams County #12, and Newport have large discrepancy scores on three out of the 18. On the other hand, Berkeley and Harrison Counties, and Houston Houston have no substantial discrepancy scores on any of the variables reported here.

Since the National Survey districts were selected using three stratification criteria, i.e., enrollment, region, and compensatory grant status, it may be that an appropriately stratified comparison between the Demonstration districts and the Survey districts would reveal fewer discrepancies than a comparison between individual Demonstration districts and the entire National Survey sample.

To demonstrate this approach, certain districts have been selected and compared on several variables with the appropriately stratified subsample of National Survey districts. Results revealed that when these selected districts are compared with stratified subsamples of the National Survey sites, most large discrepancies disappear.

It appears then that the Demonstration districts are a relatively heterogeneous group with respect to demographic characteristics. There are few large or systematic differences between these districts and the probability sample of Title I

districts included in the National Survey. The differences are reduced or eliminated when comparisons are made between the Demonstration districts and an appropriately stratified subgroup of National Survey districts.

6.3.3 District Organizational Characteristics: The Place of Compensatory Education

Organizational characteristics which are of principal interest in this section are the relationship of compensatory and regular education in the Demonstration districts and the interrelationship of the various compensatory education programs which may coexist within districts. This description answers two general questions: 1) How much coordination exists between compensatory and regular programs? 2) What degree of coordination exists among the major compensatory programs?*

All 13 Demonstration districts have some degree of coordination both between compensatory and regular programs and among compensatory programs. However, as Table 6.6 reflects, the degree of both types of integration varies. Degree of coordination is defined as follows:

- High -- Programs tightly integrated, operating essentially as a single program; coordinated at both administrative and school levels.
- Medium -- Programs coordinated and designed to complement and/or supplement each other; while encouraged by administrative staff, most of coordination occurs at school levels as faculties manage multiple programs.
- Low -- Programs either operate as separate entities or coordination is largely informal, focusing on the individual child and practiced at the discretion of school-level staff.

Seven sites appear to have a high degree of coordination between the regular and the compensatory effort, in all of these, compensatory programs are deeply embedded in district instructional and/or curriculum departments.

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*Integration of programs in each site is discussed in detail in Baltzell, C., and N. Brigham, eds., op. cit.

TABLE 6.6

PROGRAM RELATIONSHIPS*

(Data Source: Site Descriptions)

DEGREE TO WHICH COMPENSATORY PROGRAMS ARE COORDINATED	DEGREE TO WHICH COMPENSATORY AND REGULAR PROGRAMS ARE COORDINATED		
	HIGH	MEDIUM	LOW
High	Alum Rock Harrison County Newport Yonkers		Berkeley County
Medium	Adams County #12	Houston Racine	
Low	Mesa		Boston Charlotte Santa Fe

* Winston-Salem, which has only one compensatory program (Title I), is excluded from this table. The coordination between regular and Title I programs in Winston-Salem is high.

This embedding appears to reflect a strong district commitment to a sense of compensatory/regular integration. Six of these seven sites have multiple compensatory programs operating simultaneously. With the exception of Mesa and Adams County #12, these sites also coordinate their multiple compensatory programs to a high degree. Here, the different programs are so closely integrated that they function essentially as one operation, and are generally regarded as such by district staff. In other words, a "package approach" concept prevails.

Two sites appear to have medium degrees of both types of coordination. In these sites, mutual planning and ongoing cooperation between program staffs is encouraged, but the intensity of commitment to this approach does not appear to be as strong as for the "high degree" sites. The primary stimulus for the mutual cooperation appears to be a district commitment to insure that compensatory programs are complementary to regular programs. Further, the major impetus for coordination seems to some at the school level as staff schedule students for the several programs within a school.

The remaining four districts exhibit comparatively low degrees of coordination between compensatory and regular programs and, with the exception of Berkeley County, among the compensatory programs themselves. For these districts, the compensatory programs may offer different types of services or focus on different populations, thus making integration unnecessary or inappropriate. For the regular and compensatory efforts, integration is essentially left to the discretion of school level personnel, as they focus on coordinating instruction for individual children. The compensatory effort is administered as a comparatively isolated unit, and integration with the regular instructional divisions at the program level is largely informal, i.e., on a personal basis.

In sum, the degree to which the compensatory programs themselves were coordinated generally was consistent with the degree to which the compensatory effort was integrated with the regular instructional effort. The most notable exceptions to this

pattern were Mesa, which exhibited high regular/compensatory integration, but low compensatory coordination, and Berkeley County, which exhibited the reverse pattern. (It is interesting to note that Mesa's approach is quite consistent with its strong philosophy of minimizing the "separateness" of compensatory programs, and that Berkeley viewed the Demonstration in part as an opportunity to strengthen inter-program coordination, particularly that between compensatory and regular programs.) Finally, the majority of Demonstration districts appear to integrate programs to a high or medium degree.

6.3.4 The Schools: Facilities and Principal Characteristics

In this section, the characteristics of the Title I and non-Title I schools in the Demonstration districts are examined. The general picture that emerges is that Title I/non-Title I school plants and facilities are not systematically different from one another, across the Demonstration sites. However, there is a tendency for non-Title I schools to be somewhat larger and to have more students per classroom, than Title I schools. On the other hand, Title I schools have somewhat more independent study stations in their classrooms. With respect to principals' characteristics, it appears that non-Title I principals have more experience both as teachers and as principals.

These conclusions are substantiated by the data presented in Tables 6.7, 6.8, and 6.9. Table 6.7, which summarizes the detailed findings presented in Tables 6.8 and 6.9, presents the noteworthy differences between the two types of schools and indicates the direction of such differences.* Tables 6.8 and 6.9 present by

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*Since item response rates were based on the entire population of schools (or slightly less), statistical tests of significance which are based on sampling error, were considered inappropriate for examining the differences between groups. Thus, arbitrary cutoff criteria were established. For continuous variables only differences greater than one quarter of the mean of the standard deviation of the two groups are examined. For dichotomous variables, which are reported as percents, only differences equal to or greater than 15% are discussed.

TABLE 6.7

NOTEWORTHY TITLE I/NON-TITLE I DIFFERENCES IN SCHOOL FACILITIES AND PRINCIPAL CHARACTERISTICS

CHARACTERISTIC	ADAMS COUNTY #12	ALUM ROCK	BERKELEY	BOSTON	CHARLOTTE	HARRISON CO.	HOUSTON	MESA	NEWPORT	RACINE	SANTA FE	WINSTON-SALEM	YONKERS
Age of main building in years		T			N	T		T		T		N	
Mean total enrollment	T	N			N	N		N		N		N	
Mean number of pupils per classroom	T	N	N	T		N				N	N		
Percentage of schools using all available classrooms	N	N	T			N	T				N		T
Percentage of schools with any "open classrooms"	N	T	T	T						N	T	N	
Percentage of schools with more than 5,000 books in library	N	T	T					T					N
Percentage of schools with regular television facilities in every classroom	N	N				N	T		T				
Percentage of schools with closed circuit television facilities in any classroom		N								N			
Percent of schools with independent study stations in any classroom	N	T	T	T		N			T				T
Number of schools reporting kitchen, auditorium, gymnasium, athletic field and cafeteria facilities.*	T		N	T	N	T	N	T					
Availability of special facilities (e.g., central media center)**	N	T	T			N	N		T				
Principal's teaching experience in years	N	T	N	N				N	N	N			
Number of years as a principal	N	N	N					N		N	N		
Number of years as principal of present school	T	N		T	N	T			N	N	N		
Percent of principals with six-year specialist's degree or Ph.D.						N		T	T				
Percent of principals whose last position was also as principal	N	N					N	N	N	T			
Percent of principals whose last position was in another district								T					

*For continuous variables only differences greater than one quarter of the mean of the standard deviation of the two groups are examined. For dichotomous variables, which are reported as percents, only differences equal to or greater than 15% are discussed. N indicates a noteworthy difference in the direction of the NTI group; T, a noteworthy difference in the direction of the TI group.

**"Index of special facilities" is a scaled item reflecting usage of the following: central media center, teacher reference center, learning laboratories, and instructional materials production center. Raw scores for the scale were standardized according to procedures described in Appendix D.

TABLE 6.8

FACILITIES OF TITLE I AND NON-TITLE I SCHOOLS BY DISTRICT

DISTRICT		N*		MEAN AGE OF MAIN BUILDING IN YEARS		MEAN TOTAL ENROLLMENT		MEAN NUMBER OF PUPILS PER CLASSROOM		PERCENTAGE OF SCHOOLS USING ALL AVAILABLE CLASSROOMS		PERCENTAGE OF SCHOOLS WITH ANY "OPEN CLASSROOMS"		PERCENTAGE OF SCHOOLS WITH MORE THAN 5,000 BOOKS IN LIBRARY		PERCENTAGE OF SCHOOLS WITH REGULAR TELEVISION FACILITIES IN EVERY CLASSROOM		PERCENTAGE OF SCHOOLS WITH CLOSED CIRCUIT TELEVISION FACILITIES IN ANY CLASSROOM		PERCENT OF SCHOOLS WITH INDEPENDENT STUDY STATIONS IN ANY CLASSROOM		NUMBER OF SCHOOLS REPORTING KITCHEN, AUDITORIUM, GYMNASIUM, ATHLETIC FIELD, AND CAFETERIA FACILITIES		AVAILABILITY OF SPECIAL FACILITIES**, (e.g., CENTRAL MEDIA CENTER)	
		TI	NTI	TI	NTI	TI	NTI	TI	NTI	TI	NTI	TI	NTI	TI	NTI	TI	NTI	TI	NTI	TI	NTI	TI	NTI	TI	NTI
ADAMS COUNTY #12	% OR MEAN	3	9	11.0	13.1	707.7	652.3	27.7	23.8	66.7	100.0	0.0	44.4	33.3	66.7	0.0	37.5	0.0	0.0	33.3	66.7	3.0	2.4	53.0	57.3
	SD			9.5	14.7	104.4	202	3.2	7.0	--	--	--	--	--	--	--	--	--	--	--	--	1.0	.7	15.7	9.7
ALUM ROCK	% OR MEAN	6	6	14.3	13.2	563.7	657.2	29.5	30.5	50.0	83.3	66.7	33.3	33.3	16.7	0.0	33.3	0.0	33.3	100.0	83.3	2.0	2.0	47.0	44.1
	SD			5.2	2.6	67.6	96.9	3.4	3.0	--	--	--	--	--	--	--	--	--	--	--	--	.6	.0	7.5	9.7
BERKELEY COUNTY	% OR MEAN	8	3	24.4	25.7	369.8	403.0	21.2	21.5	75.0	50.0	75.0	50.0	25.0	0.0	0.0	0.0	12.5	0.0	87.5	0.0	1.9	2.5	53.0	49.0
	SD			21.4	20.6	258.8	260.9	7.8	6.4	--	--	--	--	--	--	--	--	--	--	--	--	.8	.7	9.0	13.7
BOSTON	% OR MEAN	36	32	48.9	44.5	377.8	299.1	22.7	20.6	91.7	84.4	27.8	12.5	8.6	3.3	37.1	29.0	6.3	0.0	38.2	23.3	1.6	1.1	40.6	37.2
	SD			32.2	21.5	220.7	120.1	11.1	3.4	--	--	--	--	--	--	--	--	--	--	--	--	1.4	.9	11.2	8.8
CHARLOTTE	% OR MEAN	44	23	18.9	24.9	532.2	606.4	23.1	23.0	76.7	60.9	45.5	56.5	90.7	95.7	64.9	68.4	7.3	10.5	79.5	69.0	2.8	3.6	60.5	59.2
	SD			11.1	19.1	156.6	194.7	5.7	5.1	--	--	--	--	--	--	--	--	--	--	--	--	1.0	1.2	9.7	9.2
HARRISON COUNTY	% OR MEAN	24	5	56.3	41.3	294.9	401.4	21.8	27.2	62.5	100.0	4.2	0.0	8.7	0.0	33.3	80.0	0.0	20.0	30.4	80.0	2.5	1.2	40.9	45.9
	SD			18.9	25.0	161.7	167.1	4.9	2.3	--	--	--	--	--	--	--	--	--	--	--	--	1.3	.4	10.6	9.7
HOUSTON	% OR MEAN	32	87	25.8	25.3	782.1	712.9	22.8	24.5	67.7	44.8	25.0	14.9	71.0	75.7	58.6	41.0	0.0	3.7	66.7	64.3	1.6	1.9	47.8	51.8
	SD			18.2	14.6	305.9	330.3	4.4	5.5	--	--	--	--	--	--	--	--	--	--	--	--	1.7	.6	10.1	11.9
MESA	% OR MEAN	9	10	12.1	9.2	609.8	656.1	23.0	22.6	77.8	66.7	66.7	60.0	71.4	50.0	0.0	10.0	0.0	10.0	77.8	75.0	2.1	1.3	55.0	56.6
	SD			9.1	8.0	161.0	122.0	4.8	5.5	--	--	--	--	--	--	--	--	--	--	--	--	.9	.5	4.2	8.9
NEWPORT	% OR MEAN	4	6	61.5	63.3	279.3	277.0	19.0	19.7	75.0	83.3	0.0	16.7	0.0	0.0	66.7	50.0	25.0	33.3	66.7	50.0	1.3	1.2	39.6	35.2
	SD			33.0	29.5	136.6	55.0	2.2	4.6	--	--	--	--	--	--	--	--	--	--	--	--	1.2	.8	10.1	5.3
RACINE	% OR MEAN	7	17	51.9	30.0	445.3	548.1	22.3	26.6	71.4	82.4	0.0	100.0	85.7	81.3	57.1	62.5	50.0	87.5	83.3	87.5	1.6	1.6	47.9	48.8
	SD			41.3	25.3	171.2	213.0	4.3	6.7	--	--	--	--	--	--	--	--	--	--	--	--	.8	1.4	4.1	10.2
SANTA FE	% OR MEAN	11	5	19.3	24.2	357.1	400.8	17.1	20.5	80.0	100.0	36.4	0.0	50.0	40.0	45.5	0.0	28.6	0.0	66.7	60.0	2.0	.8	57.8	43.5
	SD			13.2	16.7	189.7	220.6	6.1	2.6	--	--	--	--	--	--	--	--	--	--	--	--	.9	.4	9.5	13.6
WINSTON-SALEM	% OR MEAN	13	24	25.7	37.6	541.7	635.8	21.4	26.7	69.2	75.0	7.7	25.0	100.0	91.3	41.7	47.6	16.7	23.8	90.0	45.5	3.3	3.4	62.1	56.7
	SD			16.1	17.6	101.0	219.0	3.2	6.6	--	--	--	--	--	--	--	--	--	--	--	--	.9	1.2	8.2	9.4
YONKERS	% OR MEAN	7	18	66.5	51.1	446.0	391.4	17.0	18.9	28.6	16.7	14.3	0.0	40.0	58.8	16.7	38.9	0.0	6.3	100.0	82.4	1.7	2.9	54.0	52.3
	SD			32.4	24.6	147.3	114.2	3.9	2.9	--	--	--	--	--	--	--	--	--	--	--	--	1.5	1.1	12.1	13.3

*"N" is the population of Title I and Non-Title one schools.

**"Index of special facilities" is a scaled item reflecting usage of the following: central media center, teacher reference center, learning laboratories, and instructional materials production center. Raw scores for the scale were standardized according to procedures described in Appendix D.

TABLE 6.9

BACKGROUND AND EXPERIENCE CHARACTERISTICS OF TITLE I AND NON-TITLE I PRINCIPALS BY DISTRICT

DISTRICT		N		PRINCIPAL'S TEACHING EXPERIENCE IN YEARS		NUMBER OF YEARS AS A PRINCIPAL		NUMBER OF YEARS AS PRINCIPAL OF PRESENT SCHOOL		PERCENTAGE OF PRINCIPALS WITH 6-YEAR SPECIALIST'S DEGREE OR Ph.D		PERCENTAGE OF PRINCIPALS WHOSE LAST POSITION WAS ALSO AS PRINCIPAL		PERCENTAGE OF PRINCIPALS WHOSE LAST POSITION WAS IN ANOTHER DISTRICT	
		TI	NTI	TI	NTI	TI	NTI	TI	NTI	TI	NTI	TI	NTI	TI	NTI
ADAMS COUNTY # 12	% OR MEAN	3	9	5.0	10.9	12.0	13.8	5.3	3.9	33.3	22.2	33.3	88.9	0.0	0.0
	SD			2.6	8.2	3.5	4.4	5.7	3.2	--	--	--	--	--	--
ALUM ROCK	% OR MEAN	6	6	13.5	8.3	10.3	12.8	5.8	8.0	0.0	0.0	16.7	66.7	0.0	0.0
	SD			4.9	4.6	4.5	6.5	4.3	3.8	--	--	--	--	--	--
BERKELEY COUNTY	% OR MEAN	8	3	11.0	15.0	8.5	15.3	3.6	2.0	37.5	0.0	25.0	66.7	0.0	0.0
	SD			5.7	1.0	4.4	12.1	1.5	1.0	--	--	--	--	--	--
BOSTON	% OR MEAN	36	32	22.0	26.8	11.3	12.6	3.4	2.1	14.3	12.5	11.4	15.6	23.5	21.9
	SD			8.2	8.3	5.4	6.0	3.8	2.2	--	--	--	--	--	--
CHARLOTTE	% OR MEAN	42	23	16.7	15.9	14.4	14.5	7.6	9.2	9.5	4.5	64.3	50.0	5.0	9.1
	SD			10.4	10.3	7.5	8.7	4.8	7.3	--	--	--	--	--	--
HARRISON COUNTY	% OR MEAN	24	5	16.2	14.6	8.5	8.4	4.3	1.4	8.7	20.0	45.8	60.0	4.2	0.0
	SD			11.9	12.8	7.1	11.1	5.0	.5	--	--	--	--	--	--
HOUSTON	% OR MEAN	32	87	20.0	19.8	9.3	10.6	5.4	5.4	3.1	8.1	34.4	48.3	3.2	1.1
	SD			8.4	10.1	6.0	6.7	4.3	4.6	--	--	--	--	--	--
MESA	% OR MEAN	9	10	8.7	16.0	10.4	12.5	3.6	3.7	55.6	10.0	55.6	90.0	25.0	10.0
	SD			5.8	10.7	8.2	7.8	1.9	2.4	--	--	--	--	--	--
NEWPORT	% OR MEAN	4	6	16.5	26.0	10.0	10.3	4.3	6.3	25.0	0.0	25.0	83.3	0.0	0.0
	SD			6.6	13.4	5.5	8.0	2.4	5.5	--	--	--	--	--	--
RACINE	% OR MEAN	7	17	10.9	14.2	10.0	11.4	3.7	6.5	14.3	5.9	57.1	35.3	14.3	0.0
	SD			6.2	10.9	4.0	5.4	1.4	3.2	--	--	--	--	--	--
SANTA FE	% OR MEAN	11	5	11.7	10.0	9.2	13.0	5.6	6.8	27.3	20.0	36.4	40.0	18.2	20.0
	SD			5.0	7.1	6.7	6.0	2.9	2.4	--	--	--	--	--	--
WINSTON-SALEM	% OR MEAN	13	24	18.5	18.5	15.0	14.3	7.2	9.0	7.7	13.0	76.9	56.5	0.0	8.7
	SD			8.2	10.6	5.9	6.6	3.3	7.3	--	--	--	--	--	--
YONKERS	% OR MEAN	7	18	11.2	14.7	6.0	8.9	2.3	4.6	16.7	22.2	50.0	44.4	16.7	5.9
	SD			8.3	6.4	4.6	5.3	.8	3.9	--	--	--	--	--	--

district data on school facilities and principal characteristics, respectively. As can be seen, there are either no "noteworthy" differences or mixed patterns with respect to school space utilization, availability of "open" classrooms, and a variety of other facilities. Only in total enrollment, class size, and availability of independent study situations are there systematic trends across a number of sites. (Availability of closed circuit television facilties also favors the non-Title I schools, but this pattern is found in only two sites.) It should be noted that Title I and non-Title I differences in class size and number of independent study stations may be as much a function of program inputs as initial school resources.

While the cross-site pattern of school facility comparisons reveals few systematic differences, the within-site pattern is somewhat more interesting. In four sites--Berkeley, Boston, Mesa, and Newport--the Title I schools appear to be as well equipped or better equipped (in terms of the facilities assessed) than their non-Title I counterparts. In two sites--Adams County #12 and Harrison County--the non-Title I schools appear to be as well equipped or better equipped than the Title I schools on most of the variables included. In the remaining sites, there is no consistent difference.

With respect to principal background characteristics, as the tables show, the greater experience of the non-Title I principals holds across several related variables. In contrast, principal training does not follow this pattern. Of the three noteworthy differences on this latter variable, two favor Title I. Finally, the percent of principals who may be termed "outsiders"--whose last position was in another district--is uniformly slight for both Title I and non-Title I schools. In no site does the percent reach 50 for either Title I or non-Title I schools.

6.4 Application and Planning

6.4.1 SEA Involvement in Application

SEA involvement with the Demonstration began formally with distribution of the Request for Proposals (RFP) by NIE to the SEAs throughout the country. Several of the SEAs were aware through either formal (Reader Services in their libraries) or informal sources (social networks) that the RFP would be circulated. Others knew nothing about it until it arrived in the mail.

The process by which the 13 participating districts were chosen to submit proposals to NIE differed among SEAs primarily at the point during the application process (if any) at which SEAs chose to exercise influence. The possible intervention points were:

- Distribution (chosen by nine SEAs):* The SEA chose to distribute RFPs only to districts which they considered appropriate, either by specified or informal criteria.
- Encouragement and/or Technical Support (chosen by two SEAs): The SEA chose to encourage only certain districts to prepare proposals.
- Modification (chosen by two SEAs): The SEA chose certain proposals they received to modify or "get ready" for submission to NIE.
- Submission (chosen by three SEAs): The SEA chose from proposals they received only certain ones to forward to NIE.

Most SEAs intervened at least at the distribution point. SEAs which decided to distribute the RFP on a selective basis generally did so on one of two criteria:

- the size of the districts--those which they considered neither too small nor too large for the Demonstration; and/or
- the competence or demonstrated expertise of the districts as shown in their previous Title I program involvement.

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*Eleven SEAs are involved in the Demonstration and discussed here. Some chose to intervene in the process at more than one point.

Selective modification, which occured in New Mexico and Rhode Island, was based on a decision by SEA staff that certain proposals they received corresponded closely enough to the requirements of the RFP to have a good chance of success. Selective submission, which occured in Wisconsin, New York, and Rhode Island, was a function of the same rationale.

Several SEAs--North Carolina, New Mexico, and Rhode Island--stand out as being particularly active and intervening at several points in the application process. For example, selective SEA distribution and encouragement were crucial in securing Charlotte's involvement.

Although both the amount and points of influence varied, it is evident that SEAs played an important role in almost every case in determining which LEAs eventually submitted applications. The biasing effect of these selection criteria is perhaps most visible in terms of district size and programmatic/administrative sophistication. As noted in Section 6.3.2, Demonstration districts tend to be drawn from the top and middle strata in terms of size. In addition, several have received either statewide or national recognition for model administrative and/or programmatic operations. Further, several have very sophisticated "grantsmanship" units which are highly skilled in designing and implementing special and innovative programs.

However, this weakness of sampling in the classical sense may well be a strength in terms of this particular policy study. The SEA intervention process likely helped to net a set of districts representative of those LEAs which chafe most under existing regulations. It is the larger, more urban districts (which are often also undergoing voluntary or involuntary desegregation) that are most constrained by current regulations with respect to eligibility criteria and concentration. Further, it is the more sophisticated districts which are most apt to clearly perceive the problems with existing policies, and be most able to mount the experimental efforts to change them.

6.4.2 The LEA Application Process

The RFP concerning the Demonstration was circulated by state Title I offices to local districts during late March and early April of 1975. This same period was one in which LEAs were preparing their regular yearly reports, and the time for response to the RFP was very brief--some districts had only a week or ten days to do so. These factors combined to short circuit the process which LEAs normally used for planning, and in general resulted in a small number of administrative personnel taking full responsibility for the application.

Although the number of these administrative personnel varied from district to district--from Charlotte in which the Director alone wrote the application, to Winston-Salem where the Director of Federal Programs convened a meeting of the local administrative staff, the Title I Advisory Council, and the local School Board--the primary influence in all districts was that of time. None of the LEAs had sufficient time to involve their various constituencies to any meaningful degree, and therefore primary responsibility in all the districts devolved on one or a few core personnel.

6.4.3 LEA Planning, Participants and Activities

The major purpose of the Demonstration Planning year for all 13 districts was the development of new or modified criteria for allocation of Title I funds. In every district a Demonstration Project Director and staff took major responsibility for project planning. The Demonstration project was either directly operated from the Title I office, as in

Newport and Berkeley, or very closely coordinated with it. Also, in all districts the Demonstration Project Planning staff formed the nucleus of the core planning group.

A traditional, basic precept among students of the planning process is that the involvement of affected groups in the process leads to greater receptivity to the proposed changes among these constituencies. This approach to planning may be termed an open process, or one of collective decision-making. A closed planning process is one characterized by authority decisions--those made by one individual or a dominant coalition. Each of these approaches has its potential drawbacks. Authority decisions may lead to resistance on the part of those who feel disenfranchised. Collectively made decisions may result in resentment from those members whose viewpoint does not prevail.

The potentially affected constituencies in the Demonstration districts include Title I administrators, other LEA administrators, Title I school principals, Title I teachers and aides, Title I parents, Title I students, and peripherally other principals, teachers, parents, and community members. Among the Demonstration districts, differences existed both in the constituencies who participated, and in the degree of their participation.

Amount of participation cannot be measured precisely, but rather must be estimated. The following "ladder," which is adapted from Arnstein, attempts to classify degree of participation in decision making.** The categories are:

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*Students are in this instance an affected group, but it is not realistic to expect them to be an "involved" group, since elementary schools are the primary target of the Demonstration.

** Sherry R. Arnstein, "A Ladder of Citizen Participation," American Institute of Planners Journal, July 1969, pp. 216-24.

4 = core planning/decision-making authority;

3 = delegated power or partnership;

2 = consultation with feedback which may or may not be taken into account by core planning group; and

1 = information or progress reported to, but feedback is none, or minimal.

Table 6.10 shows participating constituencies for each LEA, with degree of constituency participation classified as above. It must be noted at this point that such a classification system obscures nuances and subtleties. For example, if a parent group enthusiastically endorses the plan devised by the core planning team, the feedback which they provide may not "show up" as it would if it were negative, and parent participation may therefore be perceived as minimal. Whether productive influence could have been exerted if the parents had disagreed with the options chosen is a point which remains moot. (However, it should be noted that all PACs had ultimate veto power over the Demonstration project.) Table 6.10 must be interpreted with an awareness of such limitations. Nevertheless, the classification scheme allows us to grossly assess the involvement of the various constituencies.

All directly affected constituencies were involved at least as recipients of progress reports during the planning year. Generally, Title I district administrators were the most involved group, serving in most sites as part of or partner to the core planning group. Other LEA administrators, Title I principals, and Title I teachers were involved to a notably lesser degree than were Title I administrators. These last three constituencies generally served as consultants or partners to the core planning group. (It is interesting to note that other LEA administrators tended to serve most frequently as consultants, while Title I teachers tended to serve most often as partners.) Title I PACs were also fairly heavily involved, although there was greater variance in degree of involvement here than any other constituency.

TABLE 6.10

DEGREE OF INVOLVEMENT OF VARIOUS CONSTITUENCIES

(Data Source: Site Descriptions)

DISTRICT	DIRECTLY AFFECTED CONSTITUENCIES				
	TITLE I ADMINISTRATORS	OTHER LEA ADMINISTRATORS	TITLE I PRINCIPALS	TITLE I TEACHERS	TITLE I PAC
Adams County #12	4	2	2	3	3
Alum Rock	NA	NA	NA	NA	NA
Berkeley Co.	4	4	1	1	1
Boston	NA	NA	NA	NA	NA
Charlotte	2	3	3	3	1
Harrison Co.	3	2	3	3	2
Houston	3	2	3	3	3
Mesa	4	2	2	2	2
Newport	4	1	1	1	2
Racine	NA	NA	NA	NA	NA
Santa Fe	3	3	3	3	3
Winston-Salem	2	2	2	2	2
Yonkers	4	4	1	1	1
TOTALS	33	25	21	22	20

Table 6.10 data can be arrayed to yield an indication of overall openness of the Demonstration planning process in each LEA. First, it must be assumed that extensive participation by Title I (and other) administrators is to be expected. Second, it must be assumed that as the planning process becomes more open, Title I principals, teachers, and PACs are increasingly included. Given these assumptions, comparison of the degree of involvement of district-level administrators with that of Title I teachers, principals, and PACs produces an assessment of overall openness. For example, LEAs which show a higher level of involvement for the latter constituencies than for the former group might be classified as highly open in Demonstration planning. Conversely, districts that show a higher level of participation for the former group might be classified as comparatively closed in their planning process.

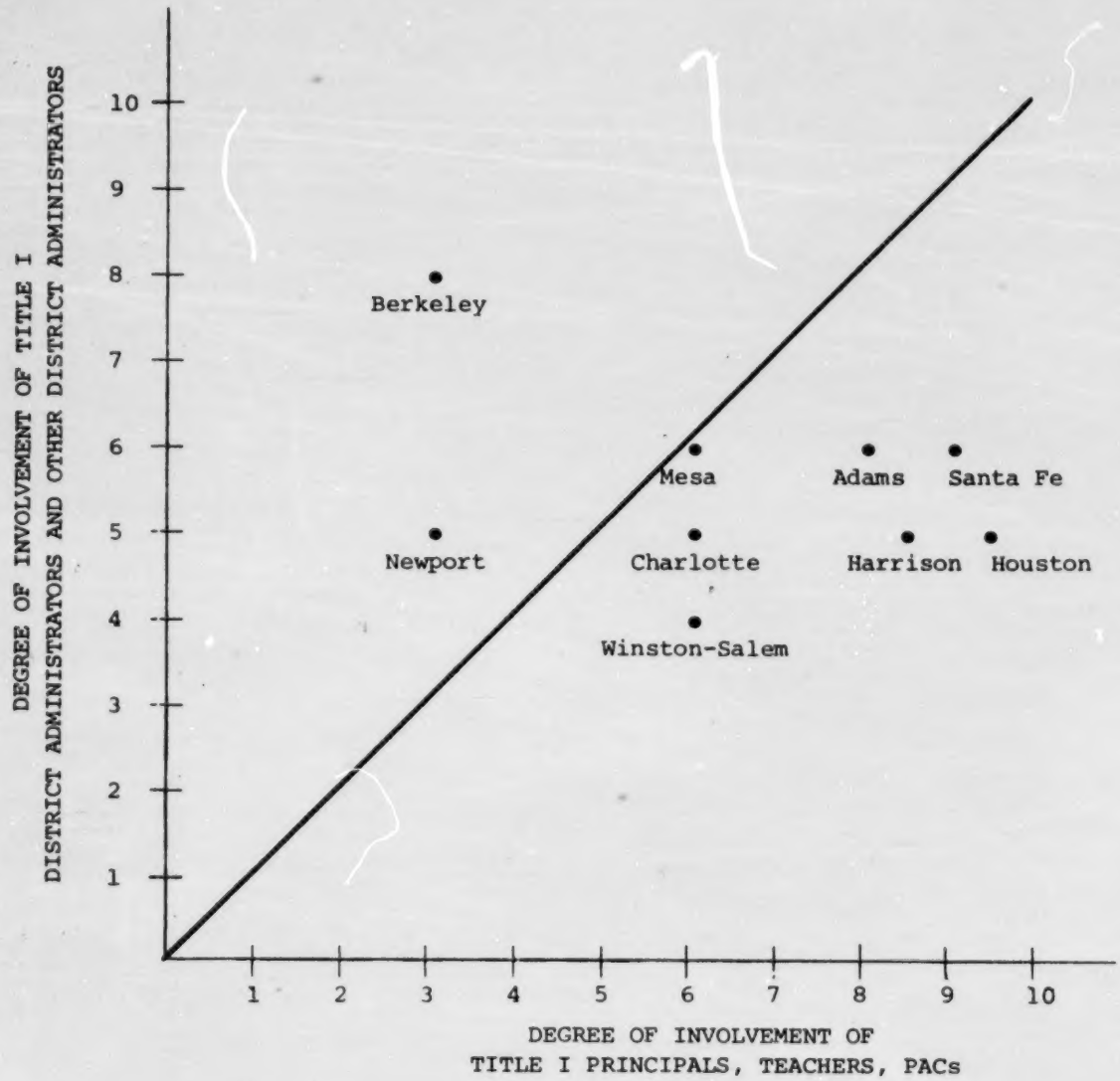
Figure 6-1 presents such an array. Adams County #12, Santa Fe, Harrison County, and Houston stand out as having highly open Demonstration planning processes. In contrast, Berkeley County and Newport exhibit closed planning processes. Mesa, Charlotte, and Winston-Salem may be classified as moderately open. Santa Fe is illustrative of the highly "open" planning process. Here the parents involved insisted that all former Title I schools be held harmless in 1975-76 and that expansion of services be financed only with carry over funds. Thus, in Santa Fe the parent group affected the basic nature of the Demonstration.

The planning process in Santa Fe was initiated by the Santa Fe Coordinator for the Demonstration, who met with the district-wide PAC in September to present the project and to solicit parent volunteers to serve on five working committees. To these committees were added Title I and non-Title I principals and teachers, teacher aides, and support service personnel. These committees constituted the core planning group. Each

FIGURE 6-1

OVERALL OPENNESS OF PLANNING

(Data Source: Site Descriptions)



committee worked in a different policy area, and four members of each were selected to serve on the Steering Committee which coordinated the work of all five committees. The District Coordinator and staff worked through all of the committees.

Mesa is illustrative of the moderately open process. Here the core planning group consisted of the Project Director, (who was assisted by a data aide and drew upon the resources of the Title I Director and the district Research and Evaluation staff), and a Steering Committee which represented the affected constituencies. Through this committee a formal survey of awareness and attitudes was conducted in the Mesa public schools. The survey also requested a rank order of importance among the three Title I components, i.e., math, parent involvement, and reading, and asked what percent of the budget should be spent on each. The core planning group then developed and tested five allocation models using the input from the survey to define the parameters of the model which was chosen. The choice of the model, however, was made completely within the core planning group.

Newport is illustrative of the closed planning. process. Here the Demonstration was administered, coordinated, and implemented by the regular Title I staff, with overall leadership provided by the Assistant Superintendent/Federal Projects Coordinator. In addition to the professional staff, one or two members of the district PAC usually attended formal planning meetings. A workshop was held in January of 1976 for principals and teachers from every school in the district. The Federal Projects Office staff designed and conducted the workshop to explain the rationale for the projected changes in Newport's Title I Program. Parents of remedial reading students were informed through a workshop session and by means of a Title I newsletter which contained news of the planning in progress. The parents (as represented by the PAC group) were extremely supportive.

In addition to variation in degree of openness, LEAs varied in the focus of the planning effort. Some districts chose a technical problem focus and concentrated immediately on exploring such issues as developing specific selection criteria, cutoff points, and eligibility indices. In contrast, other LEAs pursued broader policy issues before narrowing their focus to technical development problems. Table 6.11 shows the planning focus for all 13 districts. It is interesting to note the relationship between openness of planning and focus of the planning effort. The highly open districts tended to focus on policy exploration. (Of this group of LEAs, only Adams County #12 focused the planning effort on technical development, which, in this case, consisted of issues of school-level implementation and adaptation.) In contrast, the closed districts tended to focus on technical development. Of the moderately open LEAs, most also tended to focus on technical development.

A major purpose of examining variables related to planning is to explore the relationship between these variables and changes in allocation policy. The major relationship which emerges thus far is that discussed above, i.e., the relationship between open planning procedures and the focus of the planning effort on the exploration of policy options. However, given the data on hand, it is not possible to resolve the inherent causal dilemma; i.e., does a core planning process lead to the exploration of policy options, or does a core planning group which wishes to explore policy options tend to establish a more open process? Nevertheless, it appears reasonable to conclude that an open planning process is indeed conducive to the exploration of policy options.

It remains to be seen during the implementation year whether those districts which opted for relatively closed processes of planning encounter symptoms of discontent among their less involved constituencies, and what, if any, effect

TABLE 6.11

PRIMARY FOCUS OF THE PLANNING EFFORT

DISTRICT	POLICY EXPLORATION	TECHNICAL DEVELOPMENT
Adams County #12		X
Alum Rock	X	
Berkeley County		X
Boston		X
Charlotte	X	
Harrison County	X	
Houston	X	
Mesa		X
Newport		X
Racine		X
Santa Fe	X	
Winston-Salem		X
Yonkers	X	

this may have. Conversely, it remains to be seen whether districts with more open planning find that this approach facilitates subsequent implementation (as posited by Zaltman).*

6.4.4 SEA Roles in Planning Activities

SEA involvement during the LEA planning year may be described as either active or non-active. "Active" SEAs maintained contact at various points in the planning process and participated in meetings or planning sessions. Non-active SEAs were kept informed as the planning progressed but did not participate or intervene. Some SEAs also took a middle ground in activity. The following SEAs may be characterized as actively involved:

- North Carolina (with both Winston-Salem and Charlotte)
- Rhode Island

The non-active SEAs included:

- West Virginia (with both Berkeley County and Harrison County)
- Arizona

Rhode Island illustrates the active classification. The Rhode Island Department of Education played an important role in the Newport Demonstration. Throughout the planning year the SEA provided technical assistance, facilitated the planning process, and suggested modifications in the Implementation Proposal itself. The State Evaluation Specialist devoted approximately 15 days to the Newport school system, giving assistance over and above that provided by the regular Title I consultant to the district. As a regular member of the core planning group, he also helped to devise the eligibility criteria to be used for student selection within schools.

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*Gerald Zaltman, Robert Ducan and Jonny Holbek, Innovations and Organizations (New York: John Wiley and Sons, 1973).

Arizona illustrates the non-active category. According to both the LEA Demonstration staff and the SEA Program Specialist for Mesa, SEA involvement during the planning year was relatively minor. The SEA Program Specialist spent only one day in the fall of 1975 in the district. The LEA made its own plans, and while the SEA was aware of these plans, its influence was minimal.